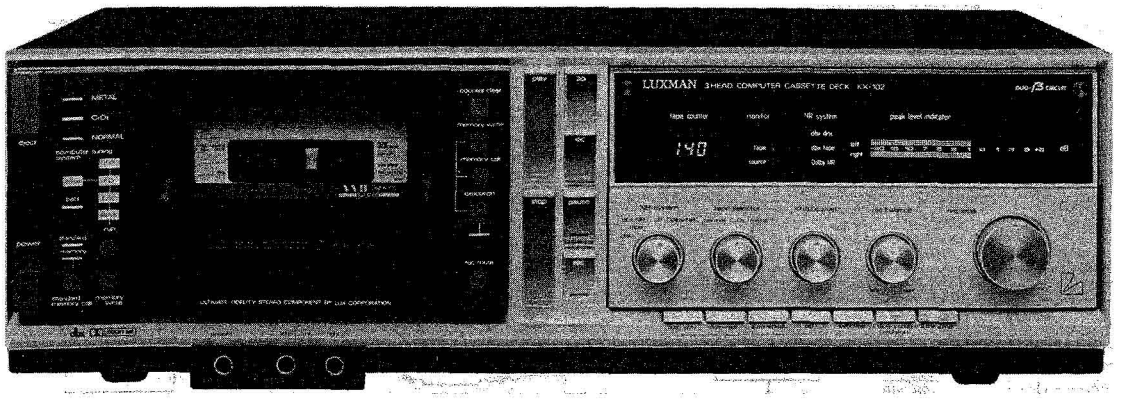
SERVICE MANUAL

Servo Face Two Head Metal Cassette Deck KX-102



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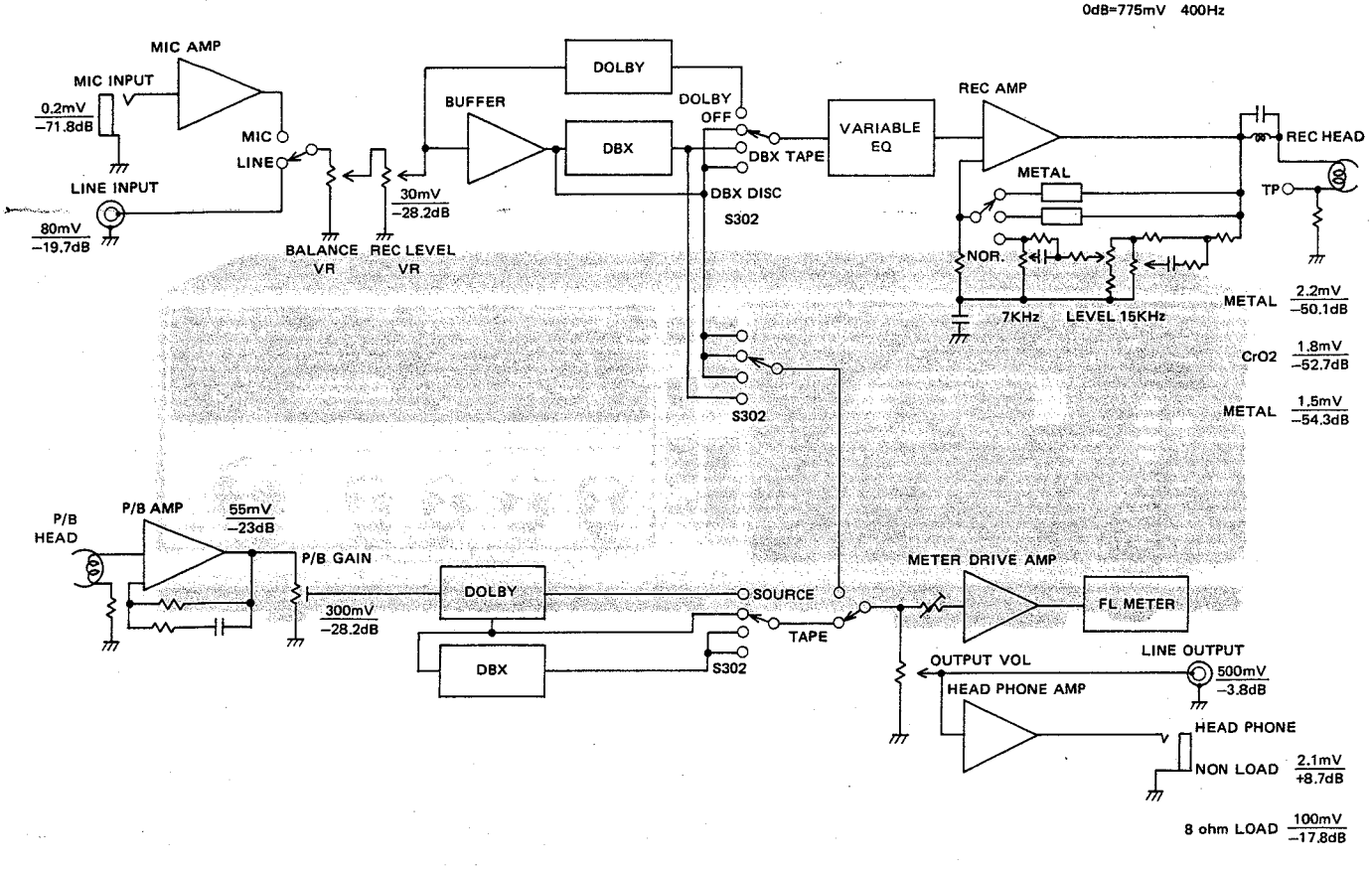
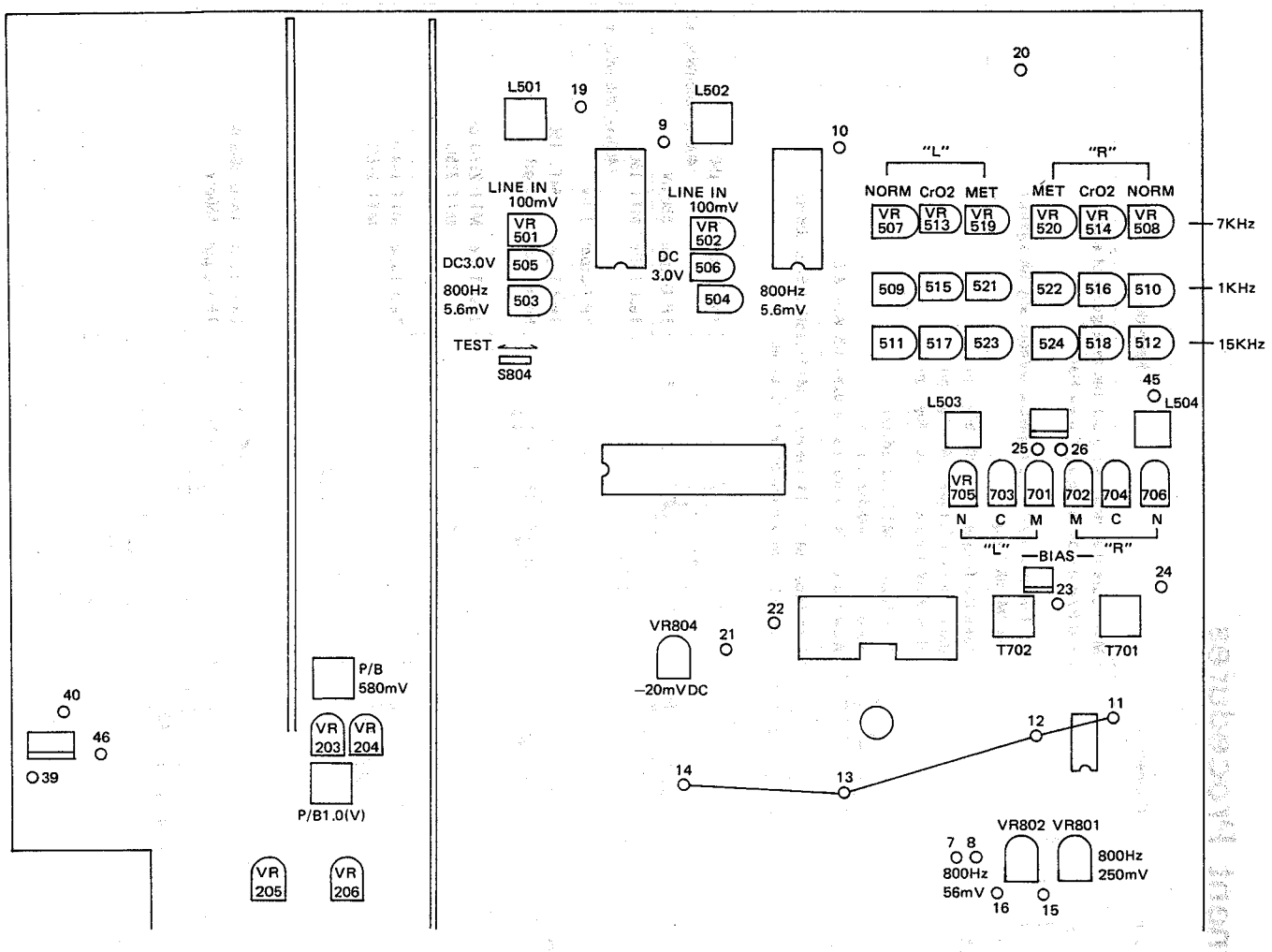
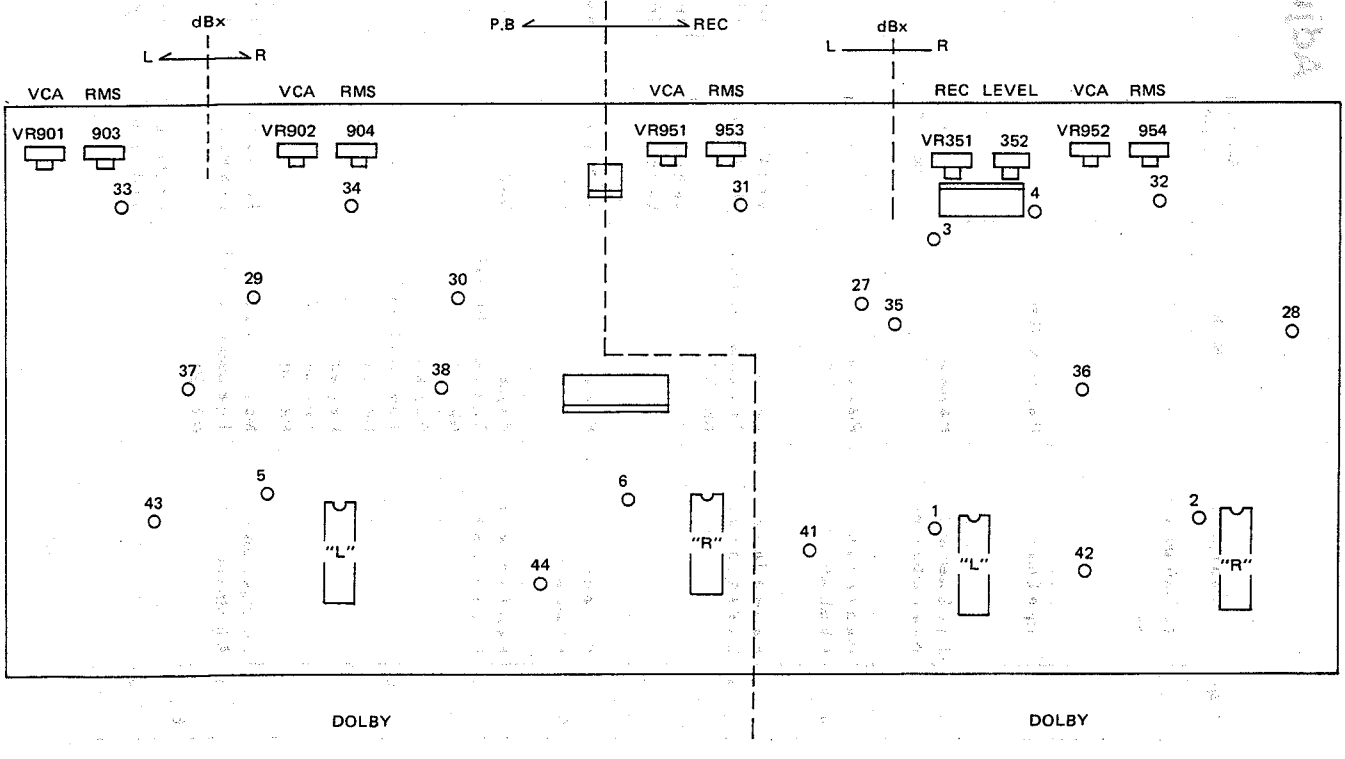
Level Diagram



Mother PCB Adjustment Locations



NR PCB Adjustment Locations



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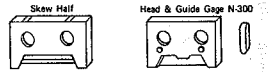
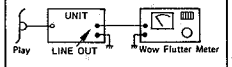
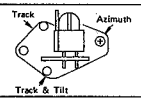
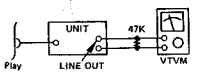
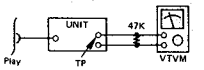
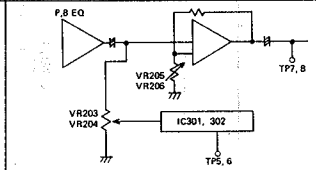
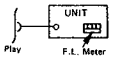
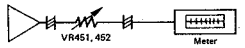
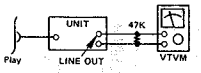
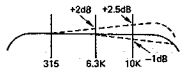
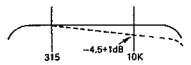
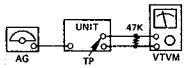
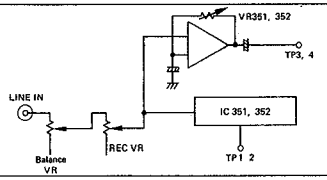
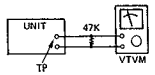
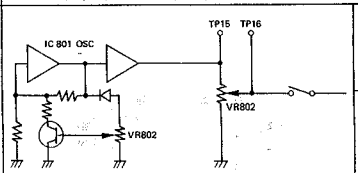
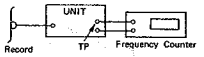
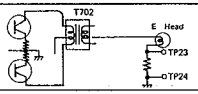
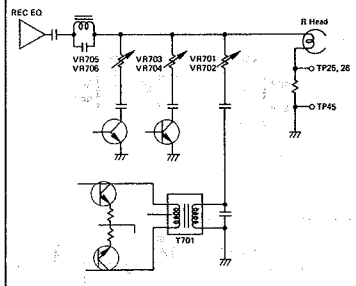
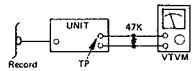
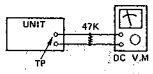
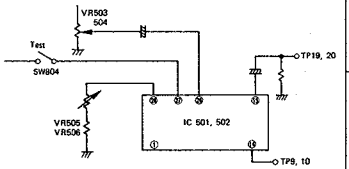
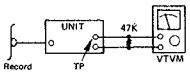
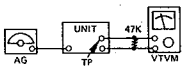
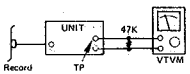
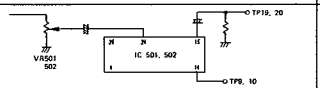
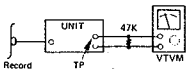
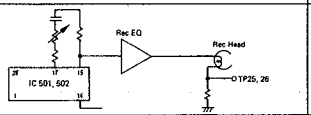
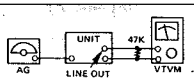
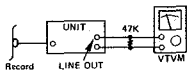
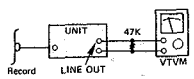
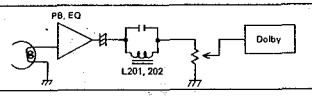
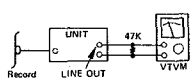
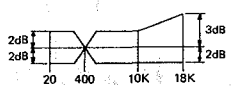
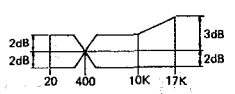
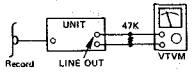
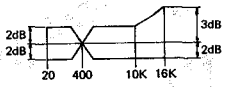
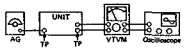
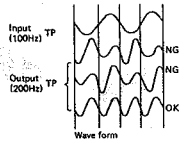
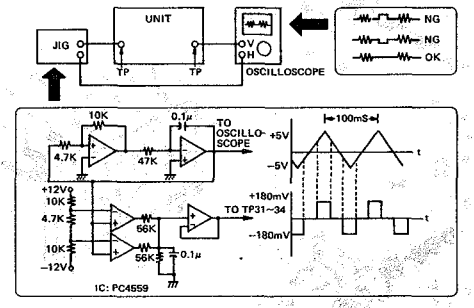
Adjustment Procedures

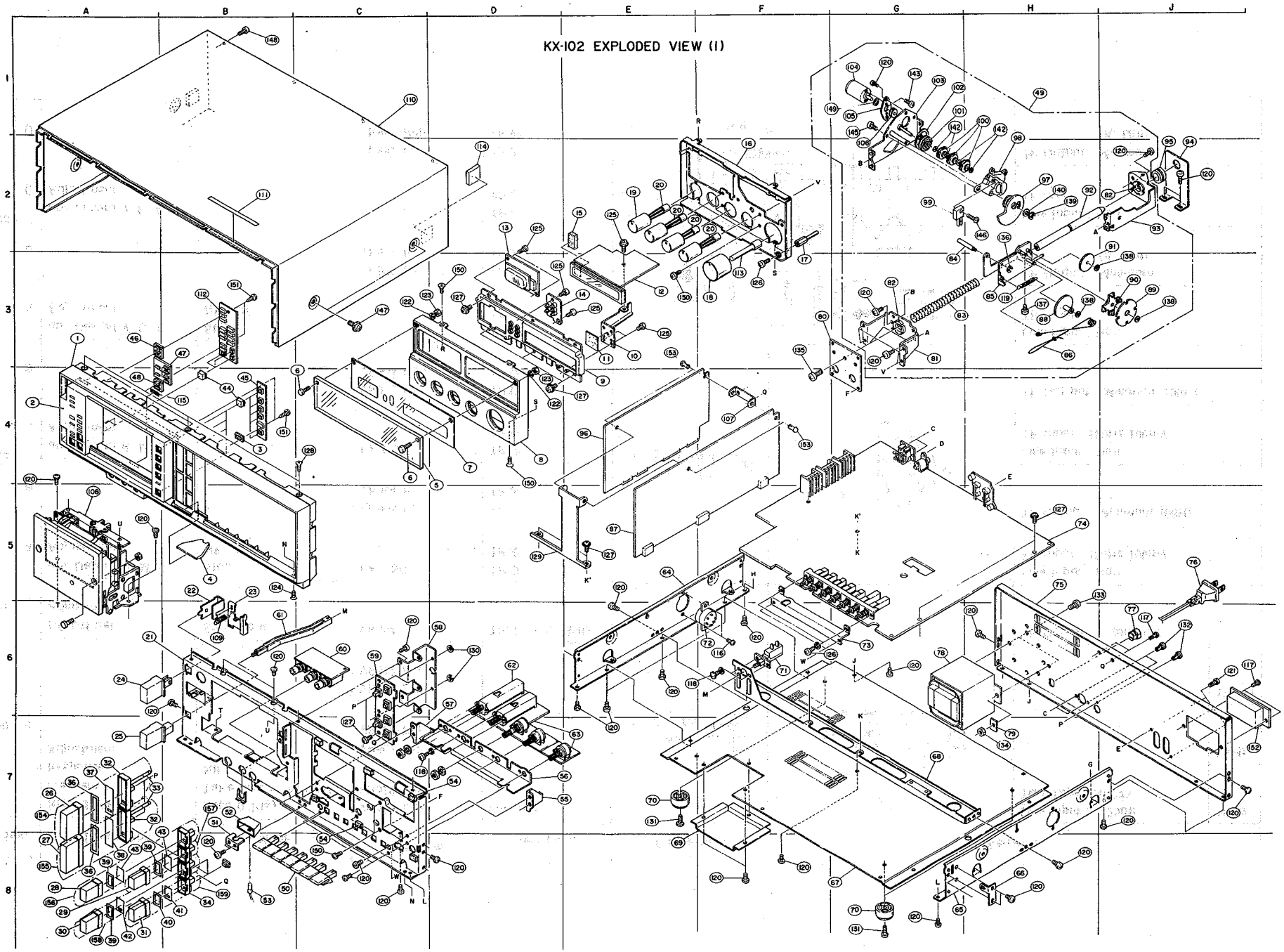
Step		Description	Mode	Adjusting Point	Test point	Connection	Remarks	
1		Tape Transportation Check	Play				Make sure that does not touch the tape guide of erase and R/P heads, by using "Skew Half". Confirm that R/P head is placed without any tilt against the "M-300" gage.	
2		Torque Check	Play FF & REW				Take Up Torque : 30- 60g. cm Back Tension Torque : 4- 8g. cm FF & REW Torque : 70-130g. cm	
3		Tape Speed and Wow Fultter Check	Playback		Line Out		Test Tape : MTT-111(3KHz) Speed : 3000Hz ±1.5% Wow Flutter : No more than 0.05%(JIS W.R.M.S.)	
4		Head Azimuth Adjustment	Playback				Test Tape : MTT-114(10KHz)or MTT-215C(315Hz, 10KHz) Line Out : Maximum of both Channel	
5	a	Playback Dolby Level Adjustment	Playback Tape Select : Normal NR : Off	VR203-Lch VR204-Rch	TP-5 TP-6			Test Tape : MTT-150 (400Hz, 200nWb/m) TP Output : 580mV
	b			VR205-Lch VR206-Rch	TP-7 TP-8			Test TaPe : MTT-150 (400Hz, 200nWb/m) TP Output : 1.0V
6		F. L. Meter Adjustment	Playback	VR451-Lch VR452-Rch	Meter Display			Test Tape : MTT-150 Meter Display : 0 dB
7	a	Playback Frequency Response Check	Playback TaPe Slect : Normal NR : Off	Step 1-5	Line Out			Test Tape : MTT-217U or MTT-215C
	b		Playback Tape Select : Cr02 NR : Off					Test Tape : MTT-144or MTT-215C
	c		Playback Tape Select : Metal NR : Off					
8	a	Line Input Level Adjustment	Monitor : Source Tape Select : Normal NR : Off	Rec Level VR Balance VR	TP-1 TP-2			Line Input : 1KHz 300mV TP Output : 580mV
	b			VR 351-Lch VR352-Rch	TP-3 TP-4			

Step		Description	Mode	Adjusting Point	Test point	Connection	Remarks	
9	a	Tone OSC Adjustment	Stop Mode Short circuit all four Terminals (TP11,12,13,14)	VR801	TP-15			TP Output : 800Hz 250mV
	b			VR802	TP-16			TP Output : 56mV
10		Bias OSC Frequency Adjustment	Record Tape Select : Metal NR : Off	T702	TP23-TP24(GND)			Input : Non TP Output : 105K ± 1KHz 280mV
11		Record Amp Bias Trap Adjustment	Record Tape Select : Metal NR : Off	L503-Lch L504-Rch T701	TP25-TP45(GND) TP26-TP45(GND)			Input : Non TP Output : Maximum
12	a	Bias Current Adjustment (Pre Set)	Record Tape Select : Metal NR : Off	VR701-Lch VR702-Rch				Input : Non TP Output : 1.3mV
	b		Record Tape Select : Cr02 NR : Off	VR703-Lch VR704-Rch				Input : Non TP Output : 0.7mV
	c		Record Tape Select : Normal NR : Off	VR705-Lch VR706-Rch				Input : Non TP Output : 0.65mV
13	a	Tone OSC Rec Out Adjustment	Stop Mode Short circuit all four Terminals (TP11,12,13,14)	VR505-Lch VR650-Rch	TP-9 TP-10			TP Output : 3.0V DC
	b		Record Short civcuit all for Terminals (TP11,12,13,14) SW(S804) : Test	VR503-Lch VR504-Rch	TP-19 TP-20			TP Output : 5.6mV
14	a	Line Rec Out Adjustment	Stop Mode NR : Off	Rec Level VR Balance VR	TP-3 TP-4		See Step 8	Line Input : 800Hz 300mV TP Output : 580mV
	b		Record NR : Off	VR501-Lch VR502-Rch	TP-19 TP-20			Line Input : 800Hz 300mV TP Output : 100mV
15		Rec Equalizer Adjustment	Record Tape Select : Normal NR : Off Rec Bias : Off	L501 L502	TP25-TP45(GND) TP26-TP45(GND)			Line Input : 23KHz, 16.8mV TP Output : Maximum
16		Input Level Adjustment	Monitor : Source TaPe Select : Normal NR : Off	Rec Level VR Balance VR	Line Out		Line Input : 400Hz 300mV TP Output : 500mV	

Step		Description	Mode	Adjusting Point	Test point	Connection	Remarks		
17	a	Record Level Adjustment	Record/Play Tape Select : Metal NR : Off	VR521-Lch VR522-Rch	Line Out			Line Input : 400Hz 300mV TP Output : 500mV ± 0.5dB	
	b		Record/Play Tape Select : Cr02 NR : Off	VR515-Lch VR516-Rch					
	c		Record/Play Tape Select : Normal NR : Off	VR509-Lch VR510-Rch					
18	a	Record Distortion Adjustment	Record/Play Tape Select : Metal NR ; Off	VR701-Lch VR702-Rch	Line Out			Line Input : 400Hz 300mV TP Output : 500mV No more than 1.5%	
	b		Record/Play Tape Select : Cr02 NR : Off	VR703-Lch VR704-Rch					
	c		Record/Play Tape Select : Normal NR : Off	VR705-Lch VR706-Rch					
19		Playback Amp Bias Trap Adjustment	Record Tape Select : Metal Dolby NR : Off	L201-Lch L202-Rch				Input : Non Line Out : Minumum	
20	a	Record/Playback Frequency Response Adjustment	Record/Play Tape Select : Metal NR : Off	VR521-Lch VR522-Rch	Line Out			Line Input : −25dB Test Tape : AC711	1KHz
				VR519-Lch VR520-Rch					7KHz
				VR523-Lch VR524-Rch					15KHz
	C		Record/Play Tape Select : Cr02 NR : Off	VR515-Lch VR516-Rch				Line Input : −25dB Test Tape : AC 512	1KHz
				VR513-Lch VR514-Rch					7KHz
				VR517-Lch VR518-Rch					15KHz

Step		Description	Mode	Adjusting Point	Test point	Connection	Remarks		
20	c	Record/Playback Frequency Response Adjustment	Record/Play TaPe Select : Normal NR : Off	VR509-Lch VR510-Rch	Line Out			Line Input : −25dB Test Tape : AC223	1KHz
				VR507-Lch VR508-Rch					7KHz
				VR511-Lch VR512-Rch					15KHz
21		DC Off Set Adjustment	Stop Mode	VR804	TP21-TP22(GND)			TP Output : −20mVDC	
22	A	dbx Decord R. M. S. Adjustment	Stop NR : OFF	EX OSC	TP29 TP30			Line Input : Non TP Input : 100Hz 100mV	
	B			VR903-Lch VR904-Rch	TP33 TP34			TP Output : Minimum 100Hz	
	C	dbx Encord R. M. S. Adjustment		EX OSC	TP27 TP28			Line Input : Non TP Input : 100Hz 100mV	
	D			VR953-Lch VR954-Rch	TP31 TP32			TP Out put : Minimum 100Hz	
23	A	dbx Decord V. C. A. Adjustment	Stop NR : OFF		TP33 TP34		Line Input : Non TP Input :	
	B			VR901-Lch VR902-Rch	TP37 TP38			TP Output : Minimum DC Drift	
	C	dbx Encord V. C. A. Adjustment			TP31 TP32			Line Input : Non TP Input :	
	D			VR951-Lch VR952-Rch	TP35 TP36			TP Output : Minimum DC Drift	

Exploded View(1)

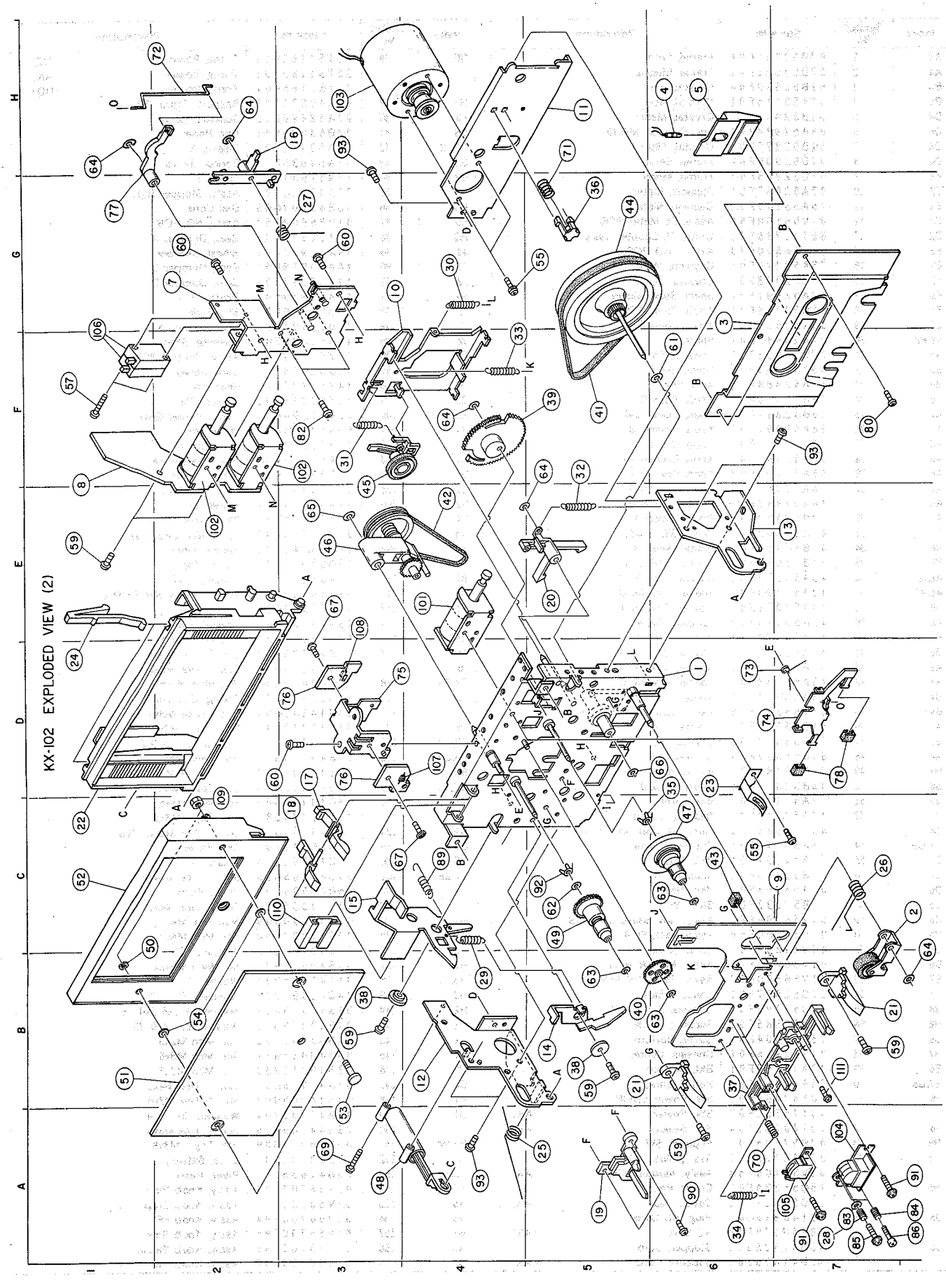


Exploded View(1) Parts List

Index	Symbol No.	Stock No.	Description	
A3	1	07D52966F04	Frame, Front	
A4	2	07D55535F01	Frame, Mecha.	
B4	3	61B55532F04	Crystal, Ind	
B5	4	61A53115F01	Crystal, Acryl	
D4	5	61B52901F02	Crystal, Meter	
C4	6	03A52884F01	Scr, Spl. "B" M3x10	
D4	7	61B52899F02	Crystal, Filter	
D4	8	07D52909F02	Frame, Servo	
E4	9	07C52903F01	Frame, Meter	
E3	10	07A52887F01	Support, Meter	
E3	11	75A53140F01	Cushion, Meter	
E3	12	01V56500F69	Ass'y, FL Meter PCB	
D2	13	65T41785F01	Lamp, FL Counter Ass'y	
E3	14	01V56500F70	Ass'y, LED PCB	
E2	15	75A56279F01	Cushion, Meter	
F2	16	27C52908F01	Chassis, Servo	
F3	17	47A52891F01	Shaft, Servo Guide	
F3	18	36B52958F01	Knob, Control 28	
E2	19	36A52963F01	Knob, Control	
E2,F2	20	47A53082F01	Shaft, A	
A6	21	27D52912F01	Chassis, Front	
B5	22	45A52889F01	Lever, Eject	
B5	23	45A52888F01	Arm, Eject	
A6	24	36B53066F01	Knob, Push C	
A7	25	36B52897F01	Knob, Power SW	
A7	26	36A52961F03	Knob, Crystal B	
A8	27	36A52961F04	Knob, Crystal B	
A8	28	36A52962F07	Knob, Crystal A	
A8	29	36A52962F08	Knob, Crystal A	
A8	30	36A52962F06	Knob, Crystal A	
A8	31	36A52962F05	Knob, Crystal A	
A7	32	07B52959F01	Frame, Knob A	
A7	33	47A52890F01	Shaft, SW Guide	
B8	34	07B52960F01	Frame, Knob B	
B8	35	61B53086F01	Crystal, Indicator A	
A8,A7	36	43A56379F02	Spacer, Film B	
A8,A7	37	43A53139F01	Spacer, Crystal D	
A8	38	43A53071F01	Spacer, Crystal A	
A8	39	43A56378F03	Spacer, Film A	
B8	40	43A56378F03	Spacer, Film A	
B8	41	43A53072F02	Spacer, Crystal B	
A8	42	43A53072F01	Spacer, Crystal B	
A8	43	43A53138F01	Spacer, Crystal C	
B4	44	36A55533F01	Knob, Push	
B4	45	01V56500F75	Ass'y, LED & SW PCB R	
A3	46	61B55532F01	Crystal, Ind	
B3	47	61B55532F02	Crystal, Ind	
A4	48	61B55532F03	Crystal, Ind	
H1	49	01C55485F01	Ass'y, Servo Mech.	
B8	50	36B52896F01	Knob, Push D	
B7	51	07A53113F01	Bkt, Lamp	
B7	52	43A53112F01	Bashing, Lamp	
B8	53	65T55548F03	Lamp, W/Cap 14V-117mA	
D7,C8	54	75A53141F01	Cushion, Panel	
E7	55	07A56254F01	Bkt, 3062	
E7	56	07B52893F01	Support, VR	
D6	57	07A56253F01	Bkt, 3061	
D6	58	07B52892F01	Bkt, SW	
C6	59	01V56500F66	Ass'y, Key Board SW PCB	
C6	60	01V56500F60	Ass'y, Jack PCB	
B6	61	45B44337F01	Lever, Knob	
D6	62	01V58400F46	Ass'y, NR SW PCB	
E7	63	01V56500F67	Ass'y, SW & VR PCB	
E5	64	27C52907F01	Chassis, Side	
G8	65	27C53392F01	Chassis, Side	
H8	66	07A52885F01	Support, Guide	
G8	67	15C52904F01	Cover, Bottom	
G7	68	27C52906F01	Chassis, Center	
E8	69	07A53356F01	Bkt, Bottom	
E7,G8	70	75A52969F01	Pad, Trannleg	
F6	71	40T47454F01	SW, Power SDLIP	
		40T45561F02	SW, Power	(AK)
F6	72	40T40705T04	SW, Select	(AK)
G6	73	07B52895F01	Support, SW	
H5	74	01V56500F59	Ass'y, Mother PCB	
		01V58700F58	Ass'y, Mother PCB	(AK)
H5	75	15D55529F01	Cover, Rear	
		15D55529F02	Cover, Rear	(AK)
J5	76	28T40916U01	Plug, AC Cord	
		28T50179F03	AC Cord	(AK)
J6	77	43B41625J01	Stopper, Cord	
		43B41625J02	Support, Cord	(AK)

Index	Symbol No.	Stock No.	Description	
G6	78	25T52166F01	Trans, Power	(UZ)
		25T51182F01	Trans, Power	(AK)
		25T52165F01	Trans, Power	(UQ)
H7	79	07A40871F01	Support, Trans Washer	
F3	80	07A52886F01	Support, Servo	
G3	81	07B53095F01	Bkt, Panel	
G3,J2	82	43A52932F01	Sleeve, A	
G3	83	41A52935F01	Spring, Servo	
G3	84	47A52931F02	Shaft, 3	
H3	85	01A57211F01	Ass'y, Stopper Bkt.	
H3	86	30S43803G05	Dial Cord	
E5	87	01V56500F62	Ass'y, NR PCB	
H3	88	44A52923F01	Gear, Dumper A	
J3	89	49A52922F01	Wheel, Dumper	
J3	90	44A53019F01	Gear, Dumper C	
J2	91	44A52924F01	Gear, Dumper B	
H2	92	47A52930F01	Shaft, 10	
J2	93	07B53096F01	Bkt, Slide	
J2	94	07B52894F01	Support, Servo A	
J2	95	43A55383F01	Bushing, Shaft	
E4	96	01V56500F61	Ass'y, Control PCB	
H2	97	45B52928F01	Cam, Servo	
H1	98	44B52927F01	Gear, Fix	
G2	99	40T52936F01	Switch, Servo	
H1	100	01V41500F30	Ass'y, Planet Gear	
G1	101	49A52926F01	Wheel, 20	
G1	102	42A50299F01	Belt, Counter	
G1	103	01A57210F01	Ass'y, Motor Bkt.	
G1	104	59T52973F01	Motor, Servo	
G1	105	07A53094F01	Support, Motor	
G2	106	49A52925F01	Wheel, 10	
F4	107	07A55530F01	Bkt, Panel	
A5	108	01U55000F99	FL87E32C, CAS. DK.	
B6	109	41A53142F01	Spring, Eject	
C1	110	15D52911F01	Cover, Top	
B2	111	43A56871F01	Spacer, 1187	
B3	112	01V56500F74	Ass'y, LED & SW PCB L	
F3	113	47A56389F01	Shaft, 1376	
D2	114	43A56380F01	Spacer, Rubber 1184	
B4	115	43A57045F01	Spacer, Frame	
F6	116	03S44205G03	Scr, T-Tite M3x8	(AK)
J6	117	03S44205G38	Scr, T-Tite M3x6	
C7,E6	118	03C40014G04	Scr, Mch M3x6	
H3	119	41A52934F01	Spring, Dumper	
	120	03S44205G05	Scr, T-Tite M3x5	
J6	121	03S40012G41	Scr, Tpg. M3x8	
C3,D4	122	04S40071G01	Washer, 3.1x5.9x0.7	
C3,D4	123	02S40000G12	Nut, Hex. M3	
B5	124	03S44205G50	Scr, T-Tite M3x6 Flt.	
D2,E3	125	03S40012G03	Scr, Tpg. M3x6	
F6,F3	126	03C40014G09	Scr, Mch M3x5	
	127	03C42723U01	Scr, Cup. M3x6	
C4	128	03S44205G46	Scr, T-Tite M3x6 TRS	
D5	129	07B55531F01	Bkt, Panel	
D6	130	04C42091G11	Wash, "C" 2.5	
E7,G8	131	03S44205G25	Scr, T-Tite M4x10	
J6	132	05B41635J03	Rivet, Push	
H5	133	03S40036U07	Scr, T-Tite M4x12	
H7	134	02S40000G09	Nut, Hex M4	
F3	135	03S43997P60	Scr, Mch M4x8	
H2	136	04C42091G06	Washer, "C" 1.5	
H3	137	03S40011G22	Scr, Mch M3x12	
H3,J3	138	04A41345P01	Washer, 1.2x3.5x0.25	
H2	139	04C42091G04	Washer, "C" 3.0	
H2	140	04S40075G18	Washer, 4.1x6.5x0.25	
H1,G1	142	04S40075G06	Washer, 2.1x4x0.25	
G1	143	03S43997P58	Scr, Mch M2x3	
G1	145	03S40011G17	Scr, Mch M3x6	
H2	146	03S40011G30	Scr, Mch M2x6	
C3	147	03S40036U01	Scr, T-Tite M4x8	
B1	148	03S44205G02	Scr, T-Tite M3x6	
G1	149	43A44303P04	Washer, Oil Shiel	
	150	03S44205G16	Scr, T-Tite M3x6	
B3,B4	151	03S40012G09	Scr, Tpg. M3x8	
J7	152	15B50733F01	Case, Battery	
E3,F3	153	05B41635J02	Rivet, Push	
A7	154	01V56700F92	Ass'y, Knob Play	
A8	155	01V56700F93	Ass'y, Knob Stop	
A8	156	01V56700F94	Ass'y, Knob FF	
B7	157	01V56700F95	Ass'y, Knob Rew	
A8	158	01V56700F96	Ass'y, Knob Pause	
B8	159	01V56700F97	Ass'y, Knob Rec	

Exploded View(2)

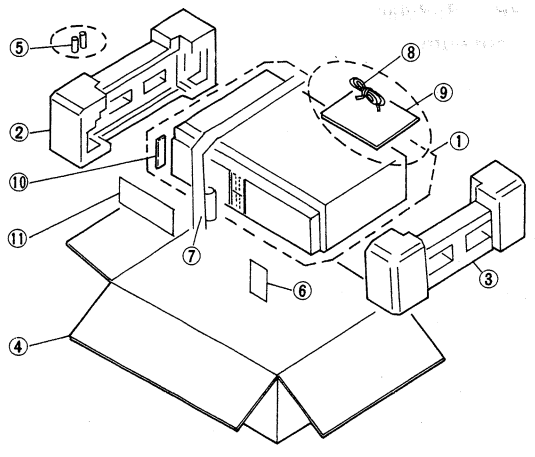


Exploded View(2) Parts List

Index	Symbol No.	Stock No.	Description
D6	1	F011−139	Ass'y, Chassis
C7	2	F014−053	Ass'y, Pinchroller
G6	3	15B44924F05	Cover, Dust
H6	4	65T55548F02	Lamp, 14V 50mA
H6	5	61A44936F01	Lens, Indicator
G2	7	F214−015	Bkt, Solenoid
F1	8	FP11N−11	Panel,Connector
C7	9	FC17D−11	Base, Head
G3	10	FR346−11	Base, Assist
H5	11	FR347−12	Bkt, Motor
B4	12	FR349−13	Bkt, Dumper
E7	13	FR350−12	Bkt, Door
B5	14	FR352−11	Lever, Safety
C3	15	FC11H−12	Arm, Eject Lock
H3	16	FR355−14	Arm, FF Solenoid
D3	17	FR356−14	Arm, Switch
C3	18	FD17T−12	Arm, Record
A5	19	FR13V−12	Ass'y, Tension Arm
E5	20	FR359−12	Arm, Play Solenoid
B5,B7	21	FR360−12	Guide, Cassette
C1	22	FD19L−12	Frame, Door
D6	23	FK551−13	Spring, Cassette
D1	24	FK553−12	Spring, Hold
A5	25	FK568−11	Spring, Door
C7	26	FK569−13	Spring, Pinchroller
G3	27	FK570−12	Spring, Sol. Bkt.
A7,A6	28	FK572−11	Spring, Azimuth
B4	29	FK573−11	Sprig, Arm Lock
G4	30	FK574−12	Spring, Assist Base
F3	31	FK575−11	Spring, Play Idler
F5	32	FK576−12	Spring, Play Sol. Arm
F4	33	FK577−12	Sprdng, Head Base
A6	34	FK578−13	Spring, Head Base
D6	35	FK579−11	Spring, Back Tension
G5	36	FM281−11	Spacer, Flywheel
B6	37	FD14U−11	Spacer, Head
B3,B5	38	FM296−11	Spacer
F5	39	FM153−11	Gear, Play
B5	40	FN154−13	Gear, Idler
F5	41	FP462−11	Belt, Main
E4	42	FP463−11	Belt, Sub
C6	43	FP464−11	Pad, Cushion
G5	44	FR13L−11	Ass'y, Flywheel
E3	45	FP469−12	Ass'y, Idler
E3	46	FP470−11	Ass'y, Clutch
C6	47	FR12N−11	Ass'y, Take Up Reel
A3	48	FP472−11	Ass'y, Dumper
C5	49	FR12P−11	Ass'y, Supply Reel

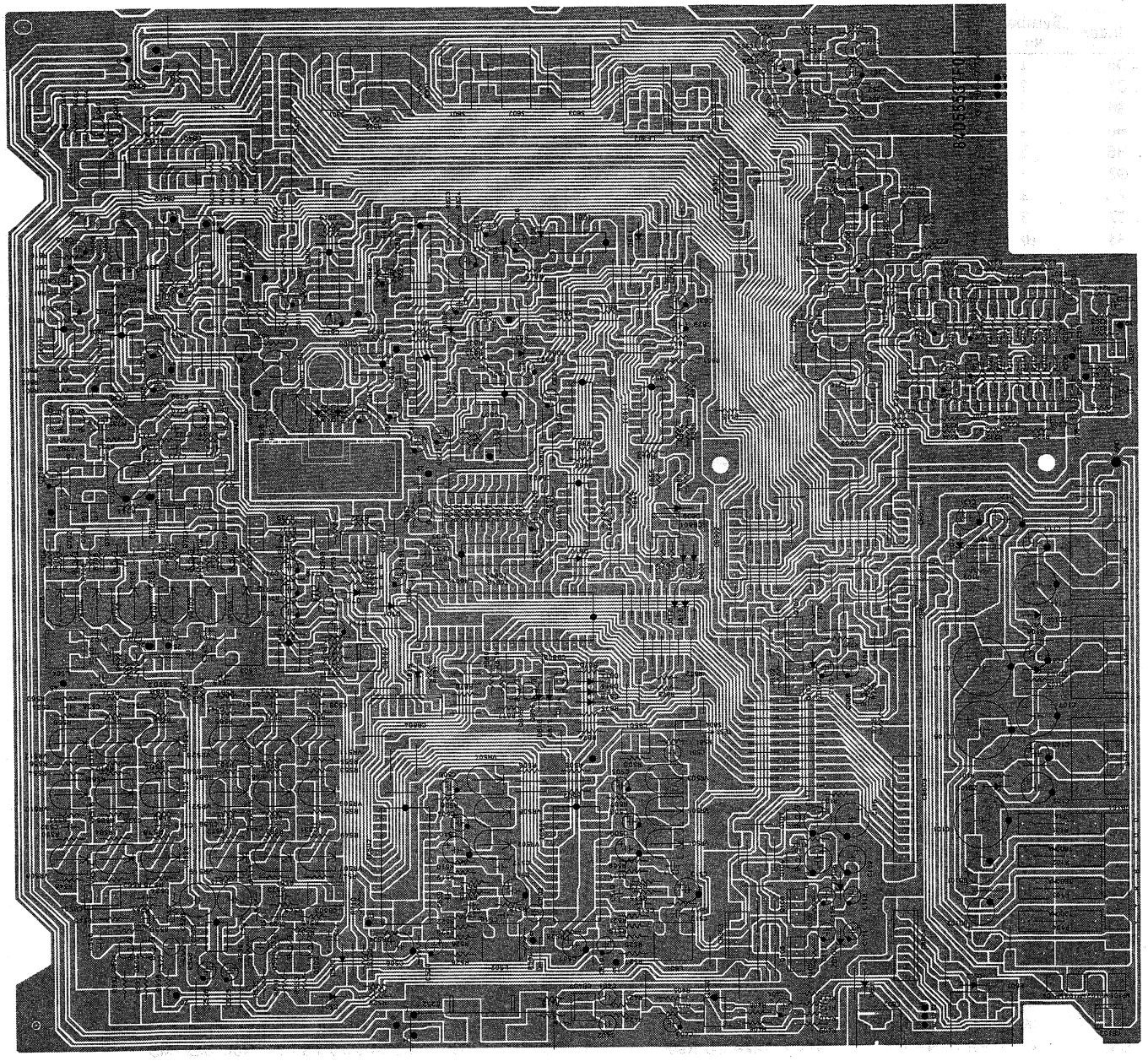
Index	Symbol No.	Stock No.	Description
C1	50	04S40071G01	Washer, 3.1x5.9x0.7
B1	51	61B52902F01	Crystal, Door
CI	52	07C47355F02	Frame, Door
A3	53	03A52883F01	Scr, Special M3x9
B2	54	04S40070G39	Washer, 3.2x6x0.5
C6,G5	55	FG114−15	Scr, M2. 6x4.5
F1	57	FG143−26	Scr, Mch. M2. 6x5
	59	KG194−12	Scr, T-Tite M3x6
	60	KG194-46	Scr, T-Tite M3x4.5
F6	61	FJ111−40	Washer, Pol. 2.1x0.5
C5	62	FJ111−18	Washer, Pol. 2x0.25
	63	FJ123−14	Washer, Lock 1.7
	64	FJ123−21	Washer, Lock 2.6
E3	65	FJ123−19	Washer, Lock 3.5
D6	66	FJ141−12	Washer, Oil Shiel
C3,E3	67	FG137−11	Scr, F-Lock M2x3
A3	69	UG11D−11	Scr, T-Tite M2x12
A6	70	FK572−11	Spring, Azimuth
H5	71	FK11F−16	Spring, Thrust
H2	72	FK11Y−13	Rod, Brake
D6	73	FK12A−11	Spring, Brake
D6	74	FC15G−13	Lever, Brake
D3	75	FC15H−11	Bkt, Sensor
D3	76	FP11E−11	Panel, Sensor
G1	77	FD12W−12	Arm, Brake
D7	78	FF11C−13	Rubber, Brake
F7	80	03S40036U03	Scr, T-Tite M3x6
F3	82	FG143−17	Scr, Mch. M2.6x3
A7	83	FJ151−11	Washer
A7	84	FK11F−23	Spring, Tilt
A7	85	UG11K−12	Scr, Bind M2x18
A7	86	UG11M−11	Scr, Tilt
C4	89	FK11C−11	Spring, Brake Arm
A6	90	FG137−12	Scr, F-Lock M2x4
A7	91	UG11K−11	Scr, Bind M2x11.5
C5	92	FK579−13	Spring, Back Tension
	93	KG189−11	Scr, Mch. M3x5
E4	101	FO82−044	Ass'y, Solenoid Bkt
E2,E3	102	PKA16106	Solenoid
H3	103	F064−093	Ass'y, Motor
A7	104	FU12G−12	Head, R/P
A7	105	FU163−11	Head, Erase
G1	106	FE173−11	SW, Slide
D4	107	AU11C−00	LED, Sensor TLN104
E3	108	AZ11H−00	Tr, Sensor TPS605
C2	109	02S40000G12	Nut, Bex. M3
B3	110	43A51937F01	Spacer, Eject
B7	111	FG137−13	Scr, F-Lock M2x5

Packing Material Parts List



Symbol No.	Stock No.	Description
1	56B40442T02	Pkg, Front Frame
2	56D55867F02	Pkg, Tray
3	56D55868F02	Pkg, Tray
4	56C53420F14	Carton, Pkg
5	60T58064F01	Battery, SUM-3
6	43A56256F01	Spacer, Packing
7	42A56255F01	Belt, Packing
8	28T44352F01	Plug,Out Put Cord
9	ME0249	Owner's Manual
10	56A57313F01	Pkg, Spacer
11	15A41885U01	Covev, Door

Master PCB



Remarks

Capacitor : El. . .Electrolytic, Ce. . .Ceramic, My. . .Mylar, BP. . .Bi-Polar
Pp. . .Polypropylene, Pe. . .Polyethylene, Ta. . .Tantalum

Resistor : Rd. . .Carbon

Master PCB Parts List

Symbol No.	Stock No.	Description
(Filter)		
CF301	91T42537U01	MPX LP-V20
CF302	91T42537U01	MPX LP-V20
(IC)		
IC201	51S43471U02	uPC4558C
IC251	51S43471U02	uPC4558C
IC401	51S43471U01	uPC4557C
IC501,502	51T52145F01	HA12020
IC503	51T51173F01	uPC4556C
IC701	51S43471U02	uPC4558C
IC801	51S43471U02	uPC4558C
IC802	51T40941U01	MC14066BCP
IC803	51T40941U01	MC14066BCP
IC804	51T52154F01	NJM2901N
IC805	51T52154F01	NJM2901N
IC806	51S43471U02	uPC4558C
IC807	51T52144F01	NJM072D
IC808	51T40941U01	MC14066BCP
IC809	51T52157F01	MC14081
IC810	51T51781F01	MC14049UB
IC811	51T52154F01	NJM2901N
IC812	51T52158F01	TD62504
IC813	51T51993F01	HD44801A48
IC814	51T40242T01	MC14011BCP
(Transistor & FET)		
Q101	48T56031F01	2SD1266P, Q
Q102	48T56031F01	2SD1266P, Q
Q103	48T56030F01	2SB941P, Q
Q104	48T40081T03	2SA733P
Q105	48T56030F01	2SB941P, Q
Q106	48T56031F01	2SD1266P, Q
Q107	48S43239G02	2SC509Y
Q108	48T56031F01	2SD1266P, Q
Q109	48T56031F01	2SD1266P, Q
Q201,202	48T44982P01	2SC1583G
Q203,204	48T43816F01	2SA798F, G
Q205,206	48T51175F01	2SC1775F
Q207,208	48T51175F01	2SC1775E
Q401,402	48T51878F01	2SC2878A, B
Q501,502	48T51878F01	2SC2878A, B
Q503,504	48S43525F05	2SC1815Y, GR
Q701,702	48S41196U03	2SC1980T
Q703,704	48S41196U03	2SC1980T
Q706	48S43525F05	2SC1815Y, GR
Q707	48T56030F01	2SB941P, Q
Q708	48T56030F01	2SB941P, Q
Q709	48T56031F01	2SD1266P, Q
Q710	48S43525F05	2SC1815Y, GR
Q711	48S43525F05	2SC1815Y, GR
Q712	48S43525F05	2SC1815Y, GR
Q713	48S43525F05	2SC1815Y, GR
Q801	48T52152F01	2SK30A, GR FET
Q802	48T52122F01	2SK301R FET
Q803	48S43525F05	2SC1815Y, GR
Q804	48S43525F05	2SC1815Y, GR
Q805	48S43525F05	2SC1815Y, GR
Q806	48S43525F05	2SC1815Y, GR
(Variable Resistor)		
VR203,204	18T52946F17	47K
VR205,206	18T52946F11	4.7K
VR501,502	18T52946F13	10K
VR503,504	18T52946F13	10K
VR505,506	18T52946F15	22K
VR507,508	18T52946F19	100K
VR509,510	18T52946F13	10K
VR511,512	18T52946F13	10K
VR513,514	18T52946F19	100K
VR515,516	18T52946F13	10K
VR517,518	18T52946F13	10K
VR519,520	18T52946F19	100K
VR521,522	18T52946F13	10K
VR523,524	18T52946F13	10K
VR701,702	18T52946F15	22K
VR703,704	18T52946F13	10K
VR705,706	18T52946F13	10K
VR801	18T52946F19	100K
VR802	18T52946F07	1K
VR804	18T52946F15	22K
(Diode, Bridge)		
BD101	48T50629F01	WL-02
BD102	48T50629F01	WL-02
(Terminal)		
E251	09T56001F01	Phono, Plate
E601	09T50261F01	Jack Control
E602	09T52976F01	Plate, Phono 1P
(Trans, OSC)		
T701	25T56004F01	Trans, OSC
T702	25T56004F01	Trans, OSC
(Coil)		
L201,202	24T51914F02	Trap, 10mH
L501,502	24T51914F08	Trap, 6.8mH
L503,504	24T51914F01	Trap, 4.7mH
L801	24S41449F08	Radial, 22mH
(SWitch)		
S251,401	40T55541F01	SUL731A Push
S301,302		
S601,603		
S804	40T56373F01	SSS312 Slide
(Diode)		
D401	48T51582F01	MA-150
D501	48T51582F01	MA-150
D601	48T43982F01	OA95
D602	48T43982F01	OA95
D701	48T51582F01	MA-150
D801	48T51582F01	MA-150
D802	48T51582F01	MA-150
D803	48T51582F01	MA-150
D804	48T51582F01	MA-150
D805	48T51582F01	MA-150
D806	48T51582F01	MA-150
D807	48T51582F01	MA-150
D808	48T51582F01	MA-150
D809	48T51582F01	MA-150
D810	48T51582F01	MA-150
D811	48T51582F01	MA-150
D812	48T51582F01	MA-150
D813	48T51582F01	MA-150
D814	48T51582F01	MA-150

Symbol No.	Stock No.	Description
D815	48T51582F01	MA-150
D816	48T51582F01	MA-150
D817	48T51582F01	MA-150
D818	48T51582F01	MA-150
D819	48T51582F01	MA-150
(Diode, Zener)		
ZD101	48T52739F73	HZ12B-1
ZD102	48T52739F42	HZ6C-3
ZD103	48T52739F75	HZ12B-3
ZD104	48T52739F49	HZ7C-1
ZD105	48T52739F75	HZ12B-3
ZD106	48T52739F49	HZ7C-1
ZD107	48T52739F83	HZ18-2
ZD108	48T52739F14	HZ3C-2
(Capacitor)		
C101	23S41198U72	2200uF 25V E1
C102	23S40657F14	100uF 16V E1
C103	23S40657F14	100uF 16V E1
C104	23S40657F10	10uF 16V E1
C105	23S40657F08	100uF 10V E1
C106	23S41198U73	2200uF 35V E1
C107	23S41198U57	470uF 25V E1
C108	23S40657F21	100uF 25V E1
C109	23S40657F14	100uF 16V E1
C110	23S41198U34	100uF 16V E1
C111	23S40657F51	330uF 10V E1
C112	23S41198U33	100uF 10V E1
C113	23S41198U73	2200uF 35V E1
C114	23S41198U57	470uF 25V E1
C115	23S40657F21	100uF 25V E1
C116	23S41198U41	220uF 16V E1
C117	23S40657F08	100uF 10V E1
C118	23S41198U47	330uF 10V E1
C119	23S41198U33	100uF 10V E1
C120	23S41198U57	470uF 25V E1
C121	23S40657F21	100uF 25V E1
C201,202	08T42081U07	180pF Pe
C203,204	08T42081U01	100pF Pe
C205,206	23T42477F06	10uF 16V BP E1
C207,208	08S40656F10	0.0056uF My
C209,210	23S41192U17	4.7uF 25V BP E1
C211,212	23S40657F16	4.7uF 25V E1
C213,214	23S40657F16	4.7uF 25V E1
C215,216	23T42477F09	4.7uF 25V BP E1
C217,218	08T42081U09	220pF Pe
C219,220	08T52448F13	0.001uF Pp
C221,222	23S41192U28	10uF 16V BP E1
C223,224	23S40657F16	4.7uF 25V E1
C251,252	23T42477F06	10uF 16V BP E1
C255,256	23T42477F18	2.2uF 50V BP E1
C257,258	23S41198U09	4.7uF 50V E1
C401,402	23T42477F06	10uF 16V BP E1
C403,404	23S40657F16	4.7uF 25V E1
C501,502	23T42477F16	1uF 50V BP E1
C503,504	23S41198U12	10uF 50V E1
C505,506	23S40657F10	10uF 16V E1
C507,508	23S40657F14	100uF 16V E1
C509,510	23S40657F14	100uF 16V E1
C511,512	08S40656F15	0.015uF My

Symbol No.	Stock No.	Description
C513,514	23S41198U34	100uF 16V E1
C515,516	08S40656F05	0.0022uF My
C517,518	08S40656F11	0.0068uF My
C519,520	23S40657F29	2.2uF 50V E1
C521,522	23T42477F06	10uF 16V BP E1
C523,524	08S40154T09	4.7pF Ce
C525,526	23S40657F16	4.7uF 25V E1
C527,528	23T41366F12	220uF 10V NP E1
C531,532	08S40656F07	0.0033uF My
C533,534	08S40656F08	0.0039uF My
C535,536	08S40656F07	0.0033uF My
C537,538	08S40656F08	0.0039uF My
C539,540	08S40656F07	0.0033uF My
C541,542	08S40656F08	0.0039uF My
C543,544	08T42081U09	220pF Pe
C545,546	08T52448F05	0.00047uF Pp
C547,548	08S40656F11	0.0068uF My
C549,550	08S44505P51	1500pF Ce
C701,702	08T52448F25	0.0033uF Pp
C703,704	08T52448F21	0.0022uF Pp
C705,706	08T52448F01	0.00033uF Pp
C707,708	08S44505P61	10000pF Ce
C709,710	08S44505P61	10000pF Ce
C711	23S40657F21	100uF 25V E1
C713,714	23S40657F08	100uF 10V E1
C715	08S44505P61	10000pF Ce
C716	23S40657F16	4.7uF 25V E1
C717	08S40656F05	0.0022uF My
C718	08S40656F05	0.0022uF My
C719	08S40656F01	0.001uF My
C720	23S41198U42	220uF 25V E1
C721	08S40656F07	0.0033uF My
C722	08S40656F07	0.0033uF My
C723	08S40656F13	0.01uF My
C724	08S40656F13	0.01uF My
C725	08T52448F19	0,0018uF Pp
C726	08T52448F35	0.0082uF Pp
C801	08S40656F08	0.0039uF My
C802	08S40656F08	0.0039uF My
C803	23S40657F16	4.7uF 25V E1
C804	23S40657F16	4.7uF 25V E1
C805	23S41059P03	0.22uF 35V Ta
C806	23T42477F06	10uF 16V BP E1
C809	23S40657F16	4.7uF 25V E1
C810	23S40657F16	4.7uF 25V E1
C813	23S40657F16	4.7uF 25V E1
C814	23S40657F16	4.7uF 25V E1
C815	08S44503P19	0.033uF 50V My
C816	08T52448F16	0.0013uF Pp
C819	08T50579F16	0.18uF
C820	08T44481F41	0.015uF Pp
C821	23S40657F16	4.7uF 25V E1
C822	23S40657F16	4.7uF 25V E1
C823	23S41059P08	1uF 35V Ta
C828	23S40657F16	4.7uF 25V E1
C829	23S40657F16	4.7uF 25V E1
C830	23S40657F16	4.7uF 25V E1
C831	23T40475U14	10uF 16V E1
C832	08S44505P53	2200pF Ce

Symbol No.	Stock No.	Description		
C833	08S44505P45	470pF		Ce
C834	08T44979P01	1000pF		Ce
(Resistor)				
R101	06S44593P57	470	1/4W	Rd
R102	06S44593P65	1K	1/4W	Rd
R103	06S44593P59	560	1/4W	Rd
R104	06S44593P65	1K	1/4W	Rd
R105	06S44593P65	1K	1/4W	Rd
R106	06S44593P59	560	1/4W	Rd
R107	06S44593P57	470	1/4W	Rd
R108	06S44593P65	1K	1/4W	Rd
R109	06S44593P59	560	1/4W	Rd
R201,202	06S44593P01	2.2	1/4W	Rd
R203,204	06S44594P04	39K	1/4W	Rd
R205,206	06S44594P22	220K	1/4W	Rd
R207,208	06S44593P83	5.6K	1/4W	Rd
R209,210	06S44593P98	24K	1/4W	Rd
R211,212	06S44593P83	5.6K	1/4W	Rd
R213,214	06S44593P51	270	1/4W	Rd
R215,216	06S44593P94	16K	1/4W	Rd
R217,218	06S44593P55	390	1/4W	Rd
R219,220	06S44593P94	16K	1/4W	Rd
R221,222	06S44593P79	3.9K	1/4W	Rd
R223,224	06S44593P93	15K	1/4W	Rd
R225,226	06S44593P91	12K	1/4W	Rd
R227,228	06S44594P34	680K	1/4W	Rd
R229,230	06S44594P42	1.5M	1/4W	Rd
R231,232	06S44593P87	8.2K	1/4W	Rd
R233,234	06S44593P79	3.9K	1/4W	Rd
R235,236	06S44593P81	4.7K	1/4W	Rd
R239,240	06S44593P77	3.3K	1/4W	Rd
R241,242	06S44594P14	100K	1/4W	Rd
R243,244	06S44593P33	47	1/4W	Rd
R245,246	06S44594P14	100K	1/4W	Rd
R251,252	06S44593P89	10K	1/4W	Rd
R253,254	06S44593P41	100	1/4W	Rd
R255,256	06S44594P06	47K	1/4W	Rd
R257,258	06S44594P14	100K	1/4W	Rd
R259,260	06S44593P93	15K	1/4W	Rd
R301,302	06S44594P14	100K	1/4W	Rd
R401,402	06S44593P59	560	1/4W	Rd
R403,404	06S44593P81	4.7K	1/4W	Rd
R405,406	06S44594P18	150K	1/4W	Rd
R407,408	06S44593P97	22K	1/4W	Rd
R409,410	06S44593P47	180	1/4W	Rd
R411,412	06S44593P73	2.2K	1/4W	Rd
R413,414	06S44593P41	100	1/4W	Rd
R415	06S44594P14	100K	1/4W	Rd
R416	06S44593P67	1.2K	1/4W	Rd
R417,418	06S44593P67	1.2K	1/4W	Rd
R419,420	06S44593P67	1.2K	1/4W	Rd
R421,422	06S44594P02	33K	1/4W	Rd
R501,502	06S44593P95	18K	1/4W	Rd
R503,504	06S44593P77	3.3K	1/4W	Rd
R505,506	06S44594P22	220K	1/4W	Rd
R507,508	06S44593P97	22K	1/4W	Rd
R509,510	06S44593P69	1.5K	1/4W	Rd
R511,512	06S44593P83	5.6K	1/4W	Rd
R513,514	06S44593P83	5.6K	1/4W	Rd

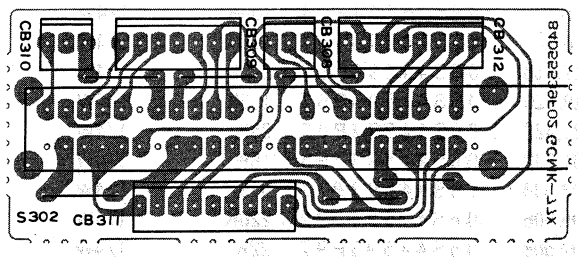
Symbol No.	Stock No.	Description		
R515,516	06S44593P87	8.2K	1/4W	Rd
R517,518	06S44593P89	10K	1/4W	Rd
R519,520	06S44593P87	8.2K	1/4W	Rd
R521,522	06S44593P49	220	1/4W	Rd
R523,524	06S44593P87	8.2K	1/4W	Rd
R525,526	06S44593P89	10K	1/4W	Rd
R527,528	06S44594P14	100K	1/4W	Rd
R529	06S44594P14	100K	1/4W	Rd
R531,532	06S44593P89	10K	1/4W	Rd
R533,534	06S44593P89	10K	1/4W	Rd
R535,536	06S44593P89	10K	1/4W	Rd
R537,538	06S44593P87	8.2K	1/4W	Rd
R539,540	06S44593P89	10K	1/4W	Rd
R541,542	06S44593P89	10K	1/4W	Rd
R547,548	06S44593P81	4.7K	1/4W	Rd
R549,550	06S44593P91	12K	1/4W	Rd
R551,552	06S44593P97	22K	1/4W	Rd
R553,554	06S44593P81	4.7K	1/4W	Rd
R555,556	06S44593P81	4.7K	1/4W	Rd
R557,558	06S44593P57	470	1/4W	Rd
R559,560	06S44593P73	2.2K	1/4W	Rd
R561,562	06S44593P81	4.7K	1/4W	Rd
R563,564	06S44593P91	12K	1/4W	Rd
R565,566	06S44593P97	22K	1/4W	Rd
R567,568	06S44593P81	4.7K	1/4W	Rd
R569,570	06S44593P81	4.7K	1/4W	Rd
R571,572	06S44593P57	470	1/4W	Rd
R573,574	06S44593P73	2.2K	1/4W	Rd
R575,576	06S44593P81	4.7K	1/4W	Rd
R577,578	06S44593P91	12K	1/4W	Rd
R579,580	06S44593P97	22K	1/4W	Rd
R581,582	06S44593P81	4.7K	1/4W	Rd
R583,584	06S44593P81	4.7K	1/4W	Rd
R585,586	06S44593P57	470	1/4W	Rd
R587,588	06S44593P73	2.2K	1/4W	Rd
R589,590	06S44593P79	3.9K	1/4W	Rd
R591,592	06S44593P17	10	1/4W	Rd
R701,702	06S44593P89	10K	1/4W	Rd
R703,704	06S44593P73	2.2K	1/4W	Rd
R705,706	06S44593P89	10K	1/4W	Rd
R707,708	06S44593P73	2.2K	1/4W	Rd
R709	06S44594P34	680K	1/4W	Rd
R710	06S44594P10	68K	1/4W	Rd
R711	06S44594P22	220K	1/4W	Rd
R712	06S44593P87	8.2K	1/4W	Rd
R713	06S44593P87	8.2K	1/4W	Rd
R714	06S44593P83	5.6K	1/4W	Rd
R719,720	06S44593P83	5.6K	1/4W	Rd
			1/4W	Rd
R721	06S44593P59	560	1/4W	Rd
R722	06S44593P59	560	1/4W	Rd
R723	06S44593P59	560	1/4W	Rd
R724	06S44593P41	100	1/4W	Rd
R725	06S44593P97	22K	1/4W	Rd
R726	06S44593P97	22K	1/4W	Rd
R727	06S44593P89	10K	1/4W	Rd
R728	06S44593P89	10K	1/4W	Rd
R729	06S44593P45	150	1/4W	Rd
R730	06S44593P37	68	1/4W	Rd

Symbol No.	Stock No.	Description		
R731	06S44593P89	10K	1/4W	Rd
R732	06S44593P89	10K	1/4W	Rd
R733	06S44594P02	33K	1/4W	Rd
R734	06S44594P02	33K	1/4W	Rd
R735	06S44593P21	15	1/4W	Rd
R736	06S44593P21	15	1/4W	Rd
R737	06S44593P97	22K	1/4W	Rd
R738	06S44593P97	22K	1/4W	Rd
R739	06S44593P21	15	1/4W	Rd
R740	06S44593P21	15	1/4W	Rd
R741	06S44593P01	2.2	1/4W	Rd
R801	06S44593P76	3K	1/4W	Rd
R802	06S44593P85	6.8K	1/4W	Rd
R803	06S44594P07	51K	1/4W	Rd
R804	06S44593P85	6.8K	1/4W	Rd
R805	06S44593P76	3K	1/4W	Rd
R806	06S44594P07	51K	1/4W	Rd
R807	06S44593P75	2.7K	1/4W	Rd
R808	06S44593P89	10K	1/4W	Rd
R809	06S44593P81	4.7K	1/4W	Rd
R810	06S44593P81	4.7K	1/4W	Rd
R811	06S44594P14	100K	1/4W	Rd
R812	06S44593P89	10K	1/4W	Rd
R813	06S44594P14	100K	1/4W	Rd
R814	06S44594P14	100K	1/4W	Rd
R815	06S44593P89	10K	1/4W	Rd
R816	06S44593P89	10K	1/4W	Rd
R817	06S44593P89	10K	1/4W	Rd
R818	06S44593P89	10K	1/4W	Rd
R819	06S44593P89	10K	1/4W	Rd
R820	06S44593P89	10K	1/4W	Rd
R821	06S44593P96	20K	1/4W	Rd
R822	06S44593P89	10K	1/4W	Rd
R823	06S44593P89	10K	1/4W	Rd
R824	06S44593P89	10K	1/4W	Rd
R825	06S44593P81	4.7K	1/4W	Rd
R826	06S44594P02	33K	1/4W	Rd
R827	06S44593P97	22K	1/4W	Rd
R828	06S44594P12	82K	1/4W	Rd
R829	06S44593P81	4.7K	1/4W	Rd
R831	06S44593P65	1K	1/4W	Rd
R833	06S44594P22	220K	1/4W	Rd
R834	06S44593P87	8.2K	1/4W	Rd
R836	06S44594P20	180K	1/4W	Rd
R837	06S44593P73	2.2K	1/4W	Rd
R838	06S44593P89	10K	1/4W	Rd
R839	06S44593P49	220	1/4W	Rd
R840	06S44593P89	10K	1/4W	Rd
R841	06S44593P89	10K	1/4W	Rd
R842	06S44593P89	10K	1/4W	Rd
R843	06S44594P14	100K	1/4W	Rd
R844	06S44593P89	10K	1/4W	Rd
R845	06S44593P97	22K	1/4W	Rd
R846	06S44593P97	22K	1/4W	Rd
R847	06S44593P97	22K	1/4W	Rd
R848	06S44593P97	22K	1/4W	Rd
R849	06S44593P97	22K	1/4W	Rd
R851	06S44593P89	10K	1/4W	Rd
R852	06S44593P96	20K	1/4W	Rd

Symbol No.	Stock No.	Description		
R853	06S44593P72	2K	1/4W	Rd
R854	06S44593P89	10K	1/4W	Rd
R855	06S44593P89	10K	1/4W	Rd
R856	06S44593P96	20K	1/4W	Rd
R857	06S44594P38	1M	1/4W	Rd
R858	06S44593P89	10K	1/4W	Rd
R859	06S44593P89	10K	1/4W	Rd
R860	06S44593P89	10K	1/4W	Rd
R861	06S44593P89	10K	1/4W	Rd
R862	06S44593P89	10K	1/4W	Rd
R863	06S44593P57	470	1/4W	Rd
R864	06S44593P59	560	1/4W	Rd
R865	06S44593P57	470	1/4W	Rd
R866	06S44593P57	470	1/4W	Rd
R867	06S44593P57	470	1/4W	Rd
R868	06S44593P59	560	1/4W	Rd
R869	06S44593P57	470	1/4W	Rd
R870	06S44593P57	470	1/4W	Rd
R871	06S44594P38	1M	1/4W	Rd
R872	06S44593P97	22K	1/4W	Rd
R873	06S44593P97	22K	1/4W	Rd
R875	06S44593P97	22K	1/4W	Rd
R876	06S44593P97	22K	1/4W	Rd
R877	06S44593P97	22K	1/4W	Rd
R881	06S44593P89	10K	1/4W	Rd
R882	06S44593P96	20K	1/4W	Rd
R883	06S44593P89	10K	1/4W	Rd
R878	06S44593P89	10K	1/4W	Rd
R879	06S44593P89	10K	1/4W	Rd
R880	06S44593P89	10K	1/4W	Rd
R881	06S44593P89	10K	1/4W	Rd
R882	06S44593P96	20K	1/4W	Rd
R883	06S44593P89	10K	1/4W	Rd
R884	06S44593P89	10K	1/4W	Rd

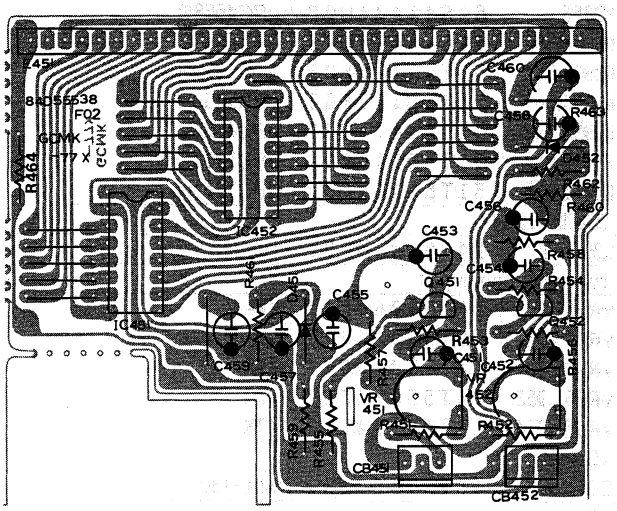
NR Switch PCB Parts List

Symbol No.	Stock No.	Description
(Switch)		
S302	40T55540F01	Rotary SRZ084N



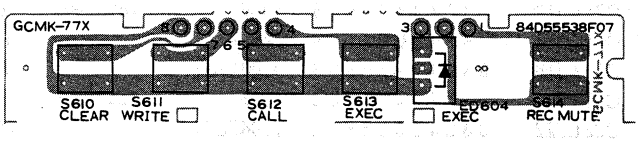
Meter PCB parts List

Symbol No.	Stock No.	Description		
(IC)				
IC451,452	51T42626F01	HA12019		
(FL Meter)				
E451	65T52950F01	12DW7YS		
(Variable Resistor)				
VR451,452	18T52946F17	47K		
(Transistor)				
Q451,452	48S43525F05	2SC1815Y, GR		
(Diode)				
D451,452	48T43982F01	0A95		
(Capacitor)				
C451,452	23S40657F10	10uF	16V	E1
C453,454	23S40657F10	10uF	16V	E1
C455,456	23S40657F10	10uF	16V	E1
C457,458	23T42478F21	0.33uF	50V LN	E1
(Resistor)				
R451,452	06S44593P97	22K	1/4W	Rd
R453,454	06S44594P29	430K	1/4W	Rd
R455,456	06S44593P71	1.8K	1/4W	Rd
R457,458	06S44594P18	150K	1/4W	Rd
R459,460	06S44594P50	3.3M	1/4W	Rd
R461,462	06S44593P85	6.8K	1/4W	Rd
R464	06S44593P33	47	1/4W	Rd



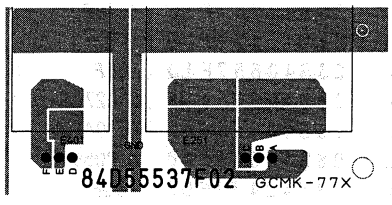
LED & SW PCB(R) Parts List

Symbol No.	Stock No.	Description
(Switch)		
S610	40T51411F01	TACT
S611	40T51411F01	TACT
S612	40T51411F01	TACT
S613	40T51411F01	TACT
S614	40T51411F01	TACT



Jack PCB Parts List

Symbol No.	Stock No.	Description
(Jack, Mic)		
E401	09T55174F12	Metal-6.5
E251	09T52956F01	M1665



NR PCB Parts List

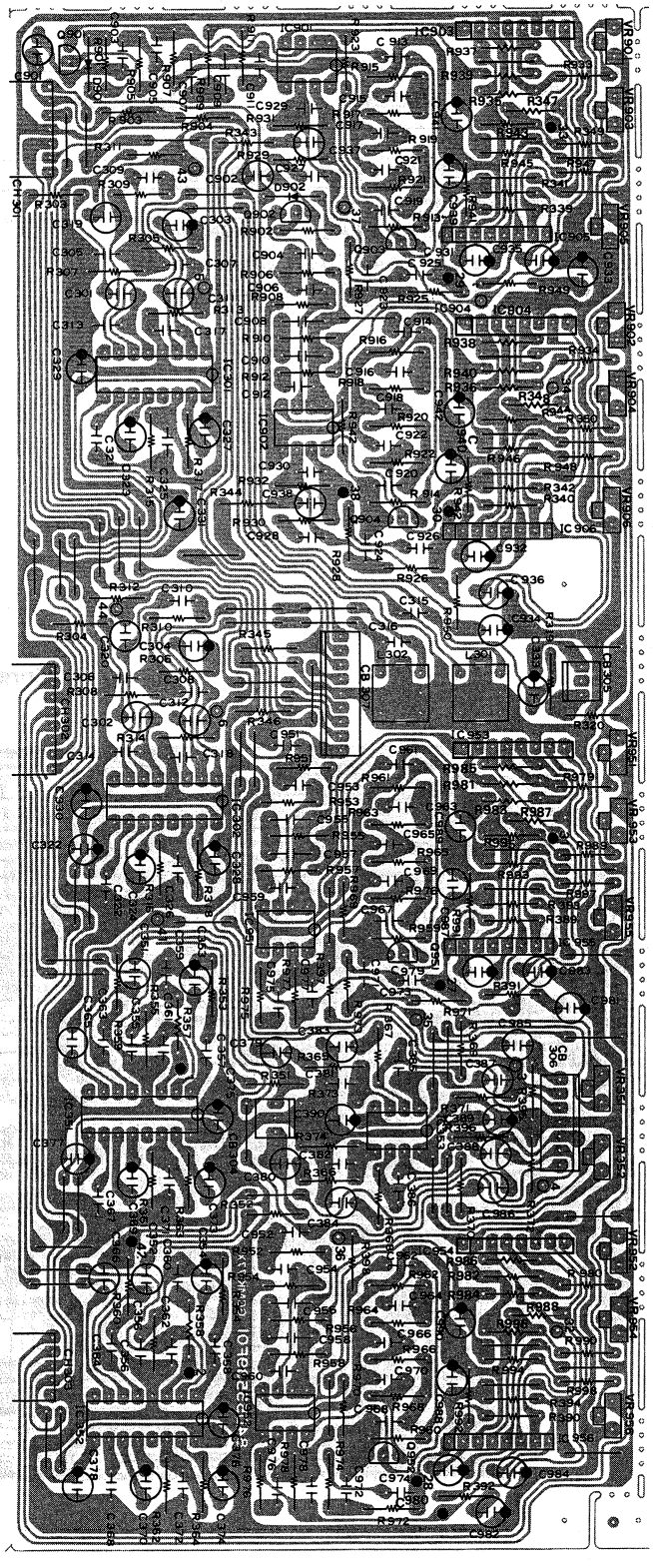
Symbol No.	Stock No.	Description
(IC)		
IC301,302	51S40114T03	NE650N
IC351,352	51S40114T03	NE650N
IC353	51S43471U02	uPC4558C
IC901,902	51S43471U02	uPC4558C
IC903,904	51T52116F01	uPC1252H
IC905,906	51T52117F01	uPC1253H
IC951,952	51S43471U02	uPC4558C
IC953,954	51T52116F01	uPC1252H
IC955,956	51T52117F01	uPC1253H
(Coil, Trap)		
L301,302	24T51914F02	10mH
(Variable Resistor)		
VR351,352	18T55064F17	47K
VR901,902	18T55064F17	47K
VR903,904	18T55064F17	47K
VR951,952	18T55064F17	47K
VR953,954	18T55064F17	47K
(Diode)		
D301,302	48T51582F01	MA-150
(Transistor)		
Q901,902	48T52122F01	23K301R
Q903,904	48S44578J01	2SC945L, P
Q951,952	48S44578J01	2SC945L, P
(Capacitor)		
C301,302	23T42477F16	1uF 50V BP E1
C303,304	23S40657F10	10uF 16V E1
C305,306	08S40656F18	0.027uF My
C307,308	08S40656F09	0.0047uF My
C309,310	08S40656F10	0.0056uF My
C311,312	23T42477F06	10uF 16V BP E1
C315,316	08T42081U09	220pF Pe
C317,318	08S40656F03	0.0015uF My
C319,320	23T42477F06	10uF 16V BP E1
C321,322	08S40656F21	0.047uF My
C323,324	23S40657F10	10uF 16V E1
C325,326	08S40656F25	0.1uF My
C327,328	23T42478F21	0.33uF 50V LN E1
C329,330	23S40657F16	4.7uF 25V E1
C331,332	23S40657F16	4.7uF 25V E1
C333	23S40657F16	4.7uF 25V E1
C351,352	23T42477F16	1uF 50V BP E1
C353,354	23S40657F10	10uF 16V E1
C355,356	08S40656F18	0.027uF My
C357,358	08S40656F09	0.0047uF My
C359,360	08S40656F10	0.0056uF My
C365,366	23T42477F06	10uF 16V BP E1
C367,368	08S40656F21	0.047uF My
C369,370	23S40657F10	10uF 16V E1
C371,372	08S40656F25	0.1uF My
C373,374	23T42478F21	0.33uF 50V LN E1
C375,376	23S40657F16	4.7uF 25V E1
C377,378	23S40657F16	4.7uF 25V E1
C379,380	23T42477F06	10uF 16V BP E1
C381,382	08T52448F05	0.00047uF Pp
C383,384	23T42477F06	10uF 16V BP E1
C387,388	23T42477F09	4.7uF 25V BP E1
C389,390	23S40657F16	4.7uF 25V E1
C901,902	23T42477F06	10uF 16V BP E1

Symbol No.	Stock No.	Description
C903,904	08S40656F25	0.1uF My
C905,906	08S40656F25	0.1uF My
C907,908	08T50579F15	0.15 Tf
C909,910	08T50579F15	0.15 Tf
C911,912	08T42081U08	200pF Pe
C913,914	08S40656F25	0.1uF My
C915,916	08S40656F25	0.1uF My
C917,918	08S40656F07	0.0033uF My
C919,920	08S40656F07	0.0033uF My
C921,922	08T52448F01	0.00033uF Pp
C923,924	08S40656F25	0.1uF My
C925,926	08S40656F13	0.01uF My
C927,928	08S40656F13	0.01uF My
C929,930	08T42081U01	100pF Pe
C931,932	23S40657F28	1uF 50V E1
C933,934	23T56604F01	10uF 16V E1
C935,936	23S40657F10	10uF 16V E1
C937,938	23T42477F06	10uF 16V BP E1
C939,940	23S40657F16	4.7uF 25V E1
C941,942	23S40657F16	4.7uF 25V E1
C951,952	08S40656F25	0.1uF My
C953,954	08S40656F25	0.1uF My
C955,956	08T50579F15	0.15 Tf
C957,958	08T50579F15	0.15 Tf
C959,960	08S40656F13	0.01uF My
C961,962	08S40656F25	0.1uF My
C963,964	08S40656F25	0.1uF My
C965,966	08S40656F07	0.0033uF My
C967,968	08S40656F07	0.0033uF My
C969,970	08T52448F01	0.00033uF Pp
C971,972	08S40666F25	0.1uF My
C973,974	08S40656F13	0.01uF My
C975,976	08T42081U01	100pF Pe
C977,978	08T42081U01	100pF Pe
C979,980	23S40657F28	1uF 50V E1
C981,982	23T56604F01	10uF 16V E1
C983,984	23S40657F10	10uF 16V E1
C985,986	23T42477F06	10uF 16V BP E1
C987,988	23S40657F16	4.7uF 25V E1
C989,990	23S40657F16	4.7uF 25V E1
(Resistor)		
R303,304	06S44593P65	1K-1/4W Rd
R305,306	06S44594P06	47K-1/4W Rd
R307,308	06S44593P77	3.3K-1/4W Rd
R309,310	06S44593P47	180-1/4W Rd
R311,312	06S44594P14	100K-1/4W Rd
R313,314	06S44594P14	100K-1/4W Rd
R315,316	06S44594P20	180K-1/4W Rd
R317,318	06S44594P24	270K-1/4W Rd
R319	06S44594P14	100K-1/4W Rd
R320	06S44594P02	33K-1/4W Rd
R339,340	06T58273F01	22 1/2W Rd
R341,342	06S44593P65	1K-1/4W Rd
R343,344	06S44593P41	100-1/4W Rd
R345,346	06S44594P14	100K-1/4W Rd
R347,348	06S44593P99	27K-1/4W Rd
R349,350	06S44593P96	20K-1/4W Rd
R351,352	06S44593P65	1K-1/4W Rd
R353,354	06S44594P06	47K-1/4W Rd

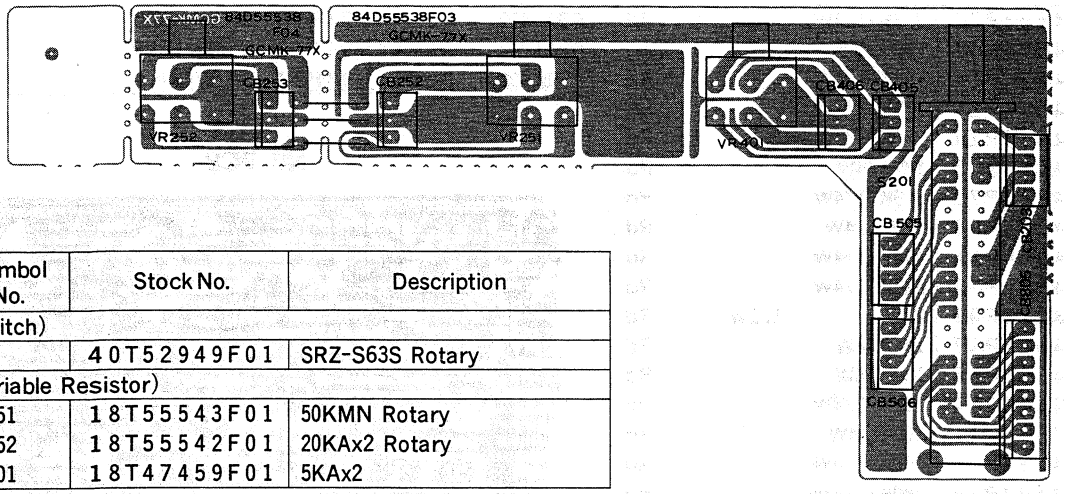
Symbol No.	Stock No.	Description		
R355,356	06S44593P77	3.3K-1/4W		Rd
R357,358	06S44593P47	180-1/4W		Rd
R359,360	06S44594P14	100K-1/4W		Rd
R361,362	06S44594P20	180K-1/4W		Rd
R363,364	06S44594P24	270K-1/4W		Rd
R365,366	06S44593P65	1K-1/4W		Rd
R367,368	06S44593P79	3.9K-1/4W		Rd
R369,370	06S44594P06	47K-1/4W		Rd
R371,372	06S44594P14	100K-1/4W		Rd
R373,374	06S44594P22	220K-1/4W		Rd
R389,390	06T58273F01	22	1/2W	Rd
R391,392	06S44593P17	1K-1/4W		Rd
R393,394	06S44593P65	1K-1/4W		Rd
R395,396	06S44594P14	100K-1/4W		Rd
R397,398	06S44593P41	100-1/4W		Rd
R901,902	06S44594P14	100K-1/4W		Rd
R903,904	06S44594P14	100K-1/4W		Rd
R905,906	06S44594P01	30K-1/4W		Rd
R907,908	06S44594P16	120K-1/4W		Rd
R909,910	06S44594P02	33K-1/4W		Rd
R911,912	06S44593P89	10K-1/4W		Rd
R913,914	06S44594P02	33K-1/4W		Rd
R915,916	06S44594P13	91K-1/4W		Rd
R917,918	06S44593P81	4.7K-1/4W		Rd
R919,920	06S44594P02	33K-1/4W		Rd
R921,922	06S44593P85	6.8K-1/4W		Rd
R923,924	06S44593P81	4.7K-1/4W		Rd
R925,926	06S44594P02	33K-1/4W		Rd
R927,928	06S44593P77	3.3K-1/4W		Rd
R929,930	06S44593P89	10K-1/4W		Rd
R931,932	06S44594P02	33K-1/4W		Rd
R933,934	06S44594P14	100K-1/4W		Rd
R935,936	06S44593P34	51-1/4W		Rd
R937,938	06S44593P89	10K-1/4W		Rd
R939,940	06S44593P79	3.9K-1/4W		Rd
R941,942	06S44594P30	470K-1/4W		Rd
R943,944	06S44593P24	20-1/4W		Rd
R945,946	06S44594P43	1.6M-1/4W		Rd
R949,950	06S44593P17	10-1/4W		Rd
R951,952	06S44594P03	36K-1/4W		Rd
R953,954	06S44594P16	120K-1/4W		Rd
R955,956	06S44594P02	33K-1/4W		Rd
R957,958	06S44593P89	10K-1/4W		Rd
R959,960	06S44594P02	33K-1/4W		Rd
R961,962	06S44594P13	91K-1/4W		Rd
R963,964	06S44593P81	4.7K-1/4W		Rd
R965,966	06S44594P02	33K-1/4W		Rd
R967,968	06S44593P85	6.8K-1/4W		Rd
R969,970	06S44593P81	4.7K-1/4W		Rd
R971,972	06S44594P02	33K-1/4W		Rd
R973,974	06S44593P77	3.3K-1/4W		Rd
R975,976	06S44593P89	10K-1/4W		Rd
R977,978	06S44594P02	33K-1/4W		Rd
R979,980	06S44594P14	100K-1/4W		Rd
R981,982	06S44593P34	51-1/4W		Rd
R983,984	06S44593P79	3.9K-1/4W		Rd
R985,986	06S44593P89	10K-1/4W		Rd
R987,988	06S44593P99	27K-1/4W		Rd
R989,990	06S44593P96	20K-1/4W		Rd

Symbol No.	Stock No.	Description		
R991,992	06S44594P30	470K-1/4W		Rd
R993,994	06S44594P43	1.6M-1/4W		Rd
R995,996	06S44593P24	20-1/4W		Rd

NR PCB

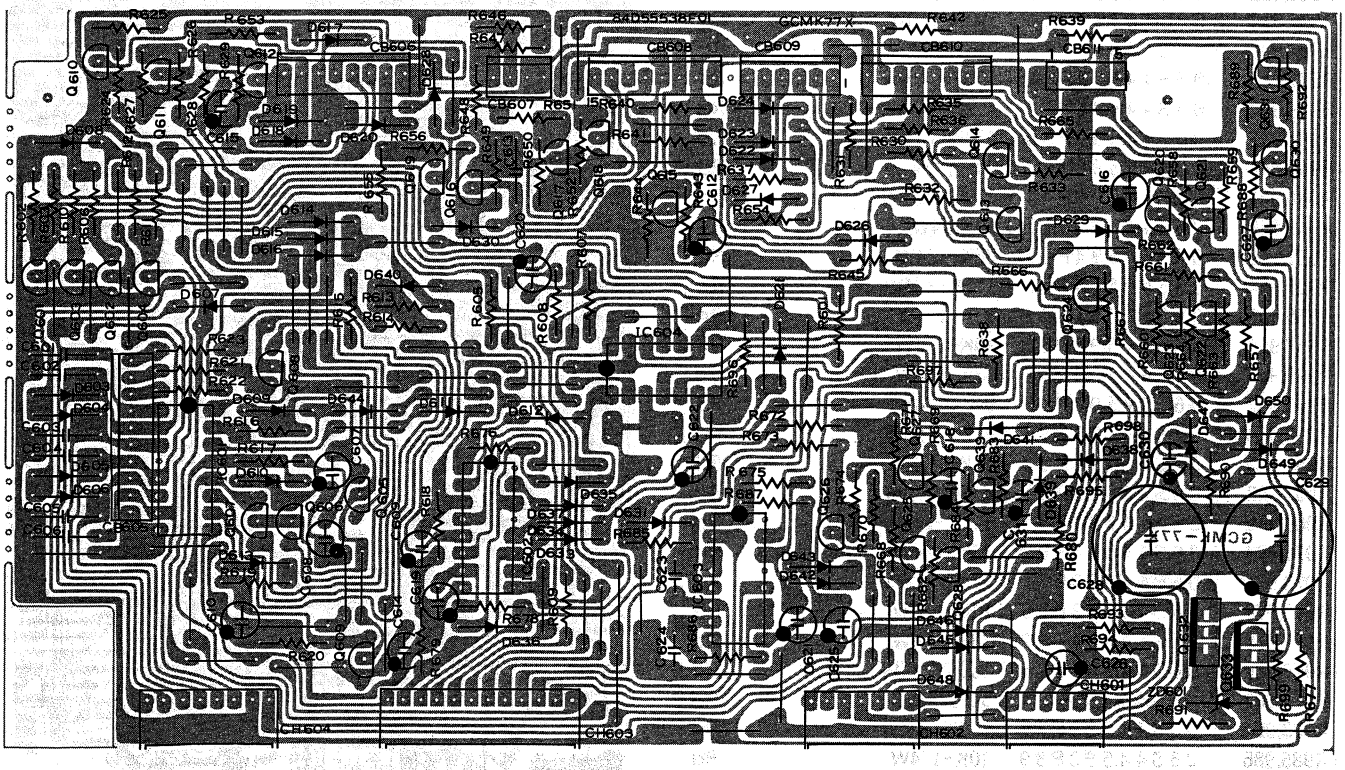


Switch & VR PCB Parts List



Symbol No.	Stock No.	Description
(Switch)		
S201	40T52949F01	SRZ-S63S Rotary
(Variable Resistor)		
VR251	18T55543F01	50KMN Rotary
VR252	18T55542F01	20KAx2 Rotary
VR401	18T47459F01	5KAx2

Control PCB



Control PCB Parts List

Symbol No.	Stock No.	Description
(IC)		
IC601	51S47110F01	BA843
IC602	51T51781F01	MC14049UB
IC603	51T51781F01	MC14049UB
IC604	51T52157F01	MC14081
(Transistor)		
Q601	48S44578J01	2SC945L, P
Q602	48S44578J01	2SC945L, P
Q603	48S44578J01	2SC945L, P
Q604	48S44578J01	2SC945L, P
Q605	48S44578J01	2SC945L, P
Q606	48S44578J01	2SC945L, P
Q607	48S44578J01	2SC945L, P
Q608	48S44578J01	2SC945L, P
Q609	48S44578J01	2SC945L, P
Q610	48S40832F04	2SC1318NC-S
Q611	48S40832F04	2SC1318NC-S
Q612	48S40832F04	2SC1318NC-S
Q613	48S44578J01	2SC945L, P
Q614	48S44578J01	2SC945L, P
Q615	48S44578J01	2SC945L, P
Q616	48S44578J01	2SC945L, P
Q617	48T40081T03	2SA733P
Q618	48T40081T03	2SA733P
Q619	48S44578J01	2SC945L, P
Q620	48S44578J01	2SC945L, P
Q621	48S44578J01	2SC945L, P
Q622	48S44578J01	2SC945L, P
Q623	48S44578J01	2SC945L, P
Q624	48S44578J01	2SC945L, P
Q625	48T40081T03	2SA733P
Q626	48S44578J01	2SC945L, P
Q627	48S44578J01	2SC945L, P
Q628	48T40081T03	2SA733P
Q630	48S40832F04	2SC1318NC-S
Q631	48S40832F04	2SC1318NC-S
Q632	48T42620F02	2SD880Y
Q633	48T44652P01	2SA490Y
Q639	48S44578J01	2SC945L, P
(Diode)		
D603	48T51582F01	MA-150
D604	48T51582F01	MA-150
D605	48T51582F01	MA-150
D606	48T51582F01	MA-150
D607	48T51582F01	MA-150
D608	48T51582F01	MA-150
D609	48T51582F01	MA-150
D610	48T51582F01	MA-150
D611	48T51582F01	MA-150
D612	48T51582F01	MA-150
D613	48T51582F01	MA-150
D614	48T51582F01	MA-150
D615	48T51582F01	MA-150
D616	48T51582F01	MA-150
D617	48T55186F01	GP10D
D618	48T55186F01	GP10D
D619	48T55186F01	GP10D
D620	48T55186F01	GP10D
D621	48T51582F01	MA-150

Symbol No.	Stock No.	Description
D622	48T51582F01	MA-150
D623	48T51582F01	MA-150
D624	48T51582F01	MA-150
D624	48T51582F01	MA-150
D626	48T51582F01	MA-150
D627	48T51582F01	MA-150
D628	48T51582F01	MA-150
D629	48T51582F01	MA-150
D630	48T51582F01	MA-150
D631	48T51582F01	MA-150
D633	48T51582F01	MA-150
D634	48T51582F01	MA-150
D635	48T51582F01	MA-150
D636	48T51582F01	MA-150
D637	48T51582F01	MA-150
D638	48T51582F01	MA-150
D639	48T51582F01	MA-150
D640	48T51582F01	MA-150
D641	48T51582F01	MA-150
D642	48T51582F01	MA-150
D643	48T51582F01	MA-150
D644	48T51582F01	MA-150
D645	48T51582F01	MA-150
D646	48T51582F01	MA-150
D647	48T51582F01	GP10D
D648	48T51582F01	GP10D
D649	48T51582F01	MA-150
D650	48T51582F01	MA-150
D651	48T51582F01	MA-150
(Capacitor)		
C601	08S44505P61	10000pF Ce
C602	08S44505P61	10000pF Ce
C603	08S44505P61	10000pF Ce
C604	08S44505P61	10000pF Ce
C605	08S44505P61	10000pF Ce
C606	08S44505P61	10000pF Ce
C607	23S40657F05	22uF 10V E1
C608	23S40657F05	22uF 10V E1
C609	23S40657F16	4.7uF 25V E1
C610	23S40657F16	4.7uF 25V E1
C612	23S40657F10	10uF 16V E1
C613	08S44505P61	10000pF Ce
C614	23S40657F16	4.7uF 25V E1
C615	23S40657F10	10uF 16V E1
C618	23S40657F10	10uF 16V E1
C619	23S40657F28	1uF 50V E1
C620	23S40657F28	1uF 50V E1
C621	23S40657F07	47uF 10V E1
C622	23S40657F10	10uF 16V E1
C623	08S40656F25	0.1uF My
C624	08S40656F25	0.1uF My
C625	23S40657F10	10uF 16V E1
C626	23S40657F05	22uF 10V E1
C627	23S40657F10	10uF 16V E1
C628	23S41198U76	3300uF 16V E1
C629	23S41198U76	3300uF 16V E1
C630	23S40657F07	47uF 10V E1
C631	23S40657F16	4.7uF 25V E1

Symbol No.	Stock No.	Description
(Resistor)		
R601	06S44593P97	22K-1/4W Rd
R602	06S44593P97	22K-1/4W Rd
R603	06S44593P97	22K-1/4W Rd
R605	06S44593P97	22K-1/4W Rd
R606	06S44593P97	22K-1/4W Rd
R607	06S44593P97	22K-1/4W Rd
R608	06S44593P97	22K-1/4W Rd
R609	06S44593P97	22K-1/4W Rd
R610	06S44593P97	22K-1/4W Rd
R611	06S44593P97	22K-1/4W Rd
R612	06S44593P97	22K-1/4W Rd
R613	06S44593P97	22K-1/4W Rd
R614	06S44593P97	22K-1/4W Rd
R615	06S44593P89	10K-1/4W Rd
R616	06S44593P97	22K-1/4W Rd
R617	06S44593P97	22K-1/4W Rd
R618	06S44594P14	100K-1/4W Rd
R619	06S44593P81	4.7K-1/4W Rd
R620	06S44594P14	100K-1/4W Rd
R621	06S44593P41	100K-1/4W Rd
R622	06S44593P41	100-1/4W Rd
R623	06S44593P41	100-1/4W Rd
R624	06S44593P57	470-1/4W Rd
R625	06S44593P73	2.2K-1/4W Rd
R626	06S44593P57	470-1/4W Rd
R627	06S44593P73	2.2K-1/4W Rd
R628	06S44593P57	470-1/4W Rd
R629	06S44593P73	2.2K-1/4W Rd
R630	06S44593P89	10K-1/4W Rd
R631	06S44593P89	10K-1/4W Rd
R632	06S44593P89	10K-1/4W Rd
R633	06S44593P89	10K-1/4W Rd
R635	06S44593P89	10K-1/4W Rd
R636	06S44593P89	10K-1/4W Rd
R637	06S44593P89	10K-1/4W Rd
R638	06S44593P89	10K-1/4W Rd
R639	06S44593P41	100-1/4W Rd
R640	06S44593P89	10K-1/4W Rd
R641	06S44593P89	10K-1/4W Rd
R642	06S44593P89	10K-1/4W Rd
R643	06S44593P97	22K-1/4W Rd
R644	06S44593P97	22K-1/4W Rd
R645	06S44594P02	33K-1/4W Rd
R646	06S44593P59	560-1/4W Rd
R647	06S44593P69	1.5K-1/4W Rd
R648	06S44594P02	33K-1/4W Rd
R649	06S44593P77	3.3K-1/4W Rd
R650	06S44593P89	10K-1/4W Rd

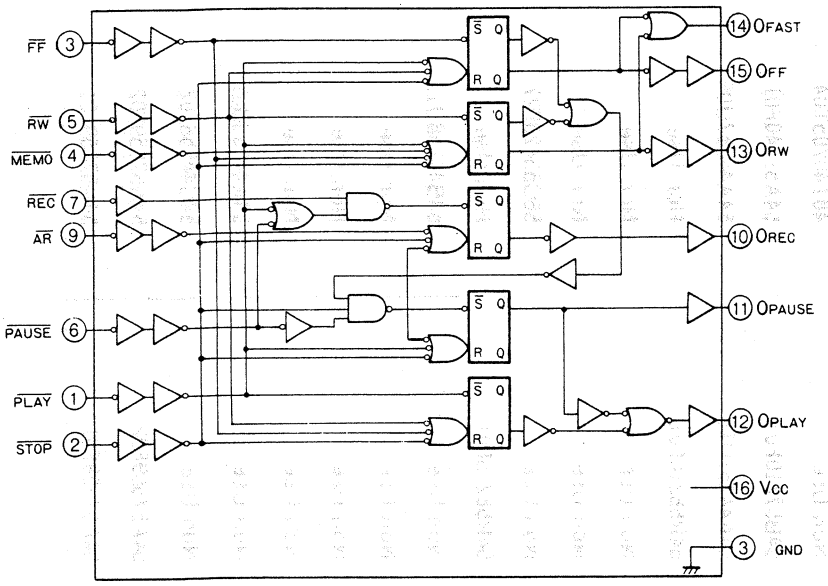
Symbol No.	Stock No.	Description
R651	06S44593P89	10K-1/4W Rd
R652	06S44593P89	10K-1/4W Rd
R653	06S44593P89	10K-1/4W Rd
R654	06S44593P89	10K-1/4W Rd
R655	06S44593P89	10K-1/4W Rd
R656	06S44593P89	10K-1/4W Rd
R657	06S44593P77	3.3K-1/4W Rd
R658	06S44593P89	10K-1/4W Rd
R659	06S44593P89	10K-1/4W Rd
R660	06S44593P77	3.3K-1/4W Rd
R661	06S44593P89	10K-1/4W Rd
R662	06S44593P89	10K-1/4W Rd
R663	06S44593P89	10K-1/4W Rd
R664	06S44593P89	10K-1/4W Rd
R665	06S44593P59	560-1/4W Rd
R666	06S44593P97	22K-1/4W Rd
R667	06S44593P97	22K-1/4W Rd
R668	06S44593P89	10K-1/4W Rd
R669	06S44593P89	10K-1/4W Rd
R670	06S44593P89	10K-1/4W Rd
R671	06S44593P97	22K-1/4W Rd
R672	06S44593P97	22K-1/4W Rd
R673	06S44593P97	22K-1/4W Rd
R674	06S44593P97	22K-1/4W Rd
R675	06S44594P14	100K-1/4W Rd
R676	06S44593P97	22K-1/4W Rd
R677	06S44593P73	2.2K-1/4W Rd
R678	06S44593P97	22K-1/4W Rd
R679	06S44593P97	22K-1/4W Rd
R680	06S44593P89	10K-1/4W Rd
R682	06S44593P89	10K-1/4W Rd
R683	06S44593P89	10K-1/4W Rd
R684	06S44593P89	10K-1/4W Rd
R685	06S44594P22	220K-1/4W Rd
R686	06S44594P14	100K-1/4W Rd
R687	06S44594P14	100K-1/4W Rd
R688	06S44593P73	2.2K-1/4W Rd
R689	06S44593P73	2.2K-1/4W Rd
R690	06S44593P73	2.2K-1/4W Rd
R691	06S44593P59	560-1/4W Rd
R692	06S44593P69	1.5K-1/4W Rd
R693	06S44593P97	22K-1/4W Rd
R694	06S44593P97	22K-1/4W Rd
R695	06S44593P97	22K-1/4W Rd
R696	06S44593P97	22K-1/4W Rd
R697	06S44593P97	22K-1/4W Rd
R698	06S44593P97	22K-1/4W Rd
R699	06S44593P73	2.2K-1/4W Rd

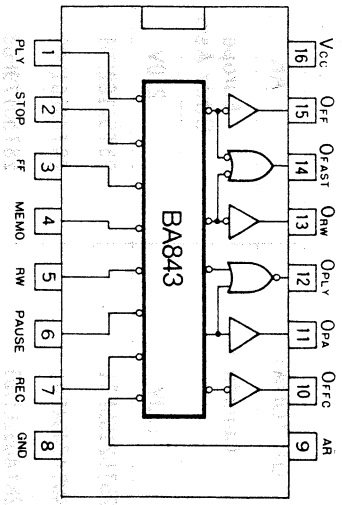
Destinations Parts List

	UZ	UC (UL, CSA)	UP (OHA)	AK
	USA	USA	Canada	Europe Other Asia
	120V	120V	120V	220V
Trans, Power	25T52166F01	25T52166F01	25T52165F01	25T51182F01
SW, Power	40T47454F01	40T47454F01	40T47454F01	40T45561F02
AC Cord	28T40916U01	28T40916U01	28T40916U01	28T50179F03
Stopper, Cord	43B41625J01	43B41625J01	43B41625J01	43B41625J02
Cover, Rear	15D55529F01	15D55529F01	15D55529F01	15D55529F02
SW, Selector	Non Use	Non Use	Non Use	40T40705T04
Label, Serial No.	54B57610F01	54B57610F01	54B57610F01	54A51740F01
Label, Voltage	54A44257U06	54A44257U07	54A44257U10	54A44257U09
Card, Warranty	68R51625F01	68R51625F01	54R58216F01	Non Use
List, Service Station	68R51626F01	68R51626F01	Non Use	Non Use
Card, Business Reply	68R57674F01	68R57674F01	Non Use	Non Use
Carton, Bulk Pkg.	Non Use	Non Use	Non Use	56C53420F27
Label, Warning (Carton)	Non Use	Non Use	54R58215F01	Non Use
Label, Carton	Non Use	Non Use	Non Use	54B44258U17
Label, UL	Non Use	54A44912F01	Non Use	Non Use
Label, Bottom Caution	54A57559F02	54A57559F02	Non Use	Non Use
Label, Side Caution	54A57559F01	54A57559F01	Non Use	Non Use
Label, CSA	Non Use	Non Use	Non Use	54A44553G01
Label, LL No.	Non Use	Non Use	Non Use	54C44558J02
Label, Bottom Caution	Non Use	Non Use	54A57559F02	54A57559F02
Label, Side Caution	Non Use	Non Use	54A57559F01	54A57559F01

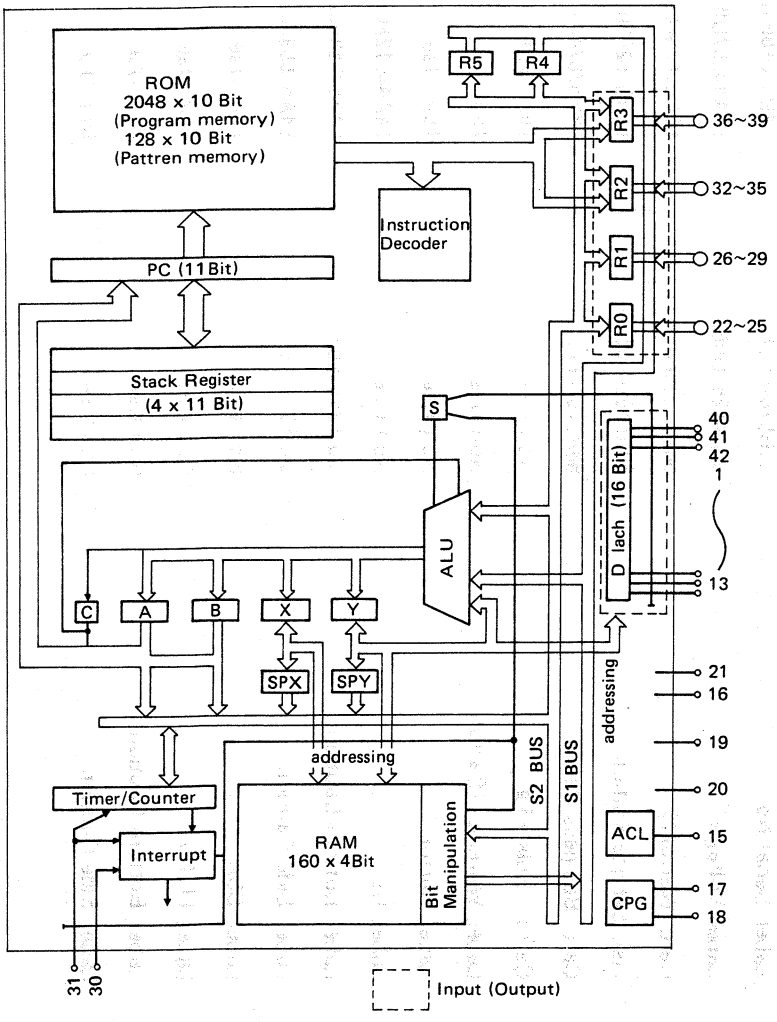
BA843

Block Diagram





HD44801A48



PIN No.		DESCRIPTION
1	CPSR	CODING PULSE R
2	LRSL	L–R SELECT
3	ADRT	A/D RETURN
4	ADST	A/D START
5	ADRS	A/D RESET
6	TEST	TEST ON
	PWFL	POWER FAILIN
7	ADSL	A/D SELECT
8	STD	LED
9	ERR	
10	BIAS	
11	OK	
12	MEM	
13	BAT	
14		
15	RESET	RESET IN
16	GND	GROUND
17	OSC1	
18	OSC2	
19	$\overline{HLT}$	HOLT IN
20	$\overline{TEST}$	
21	Vcc	Vcc
22	NOR	TAPE SELECT IN
23	CrO2	
24	FeCr	
25	METAL	
26	DTO	REC EQ DATE LINE
	ATST	BLES START SW
27	DTI	REC EQ DATE LINE
	STD	STD MEMORY SW
28	DT2	REC EQ DATE LINE
	MEMW	STD MEMORY
29	DT3	REC EQ DATE LINE
	PLM	REC PB SIGNAL DETECT
30	PLUS	TAPE RUN PULSE IN
31	ATRL	AUTO TEST RELEASE
32	STOP	STOP OUT
33	REW	REW OUT
34	RPPS	REC PLAY PAUSE OUT
35	NINH	NOISE INHI OUT
36	LTSO	REC EQ IC SELECT
37	LTS1	
38	OSC0	OSC SELECT
39	OSC1	
40	DT4	REC EQ DATE LINE
	BATT	BATTERY CHECK
41	ADIN	A/D IN
	BAT X	BATTERY CHECK
42	CPS L	CODING PULSE L

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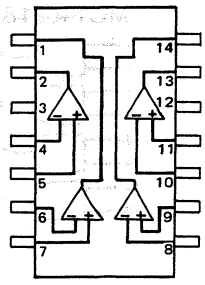
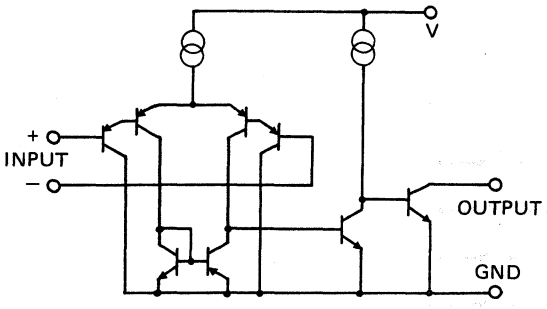
NJM2901N Quad Single

Supply Comparator

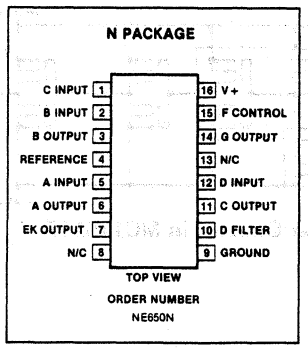


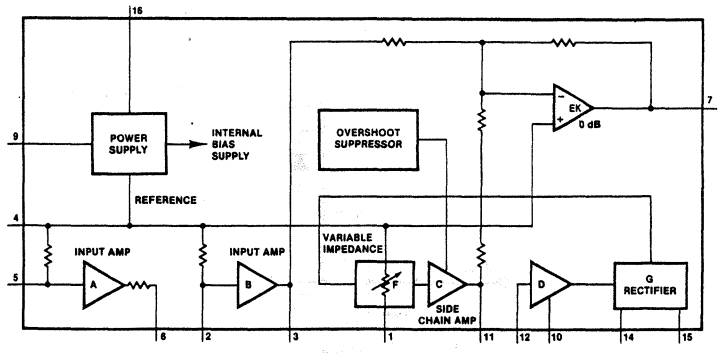
1. OUTPUT 2
2. OUTPUT 1
3. V.
4. — INPUT 1
5. + INPUT 1
6. — INPUT 2
7. + INPUT 2
8. — INPUT 3
9. + INPUT 3
10. — INPUT 4
11. + INPUT 4
12. GROUND
13. OUTPUT 4
14. OUTPUT 3



NE650N Dolby B/C Type Noise Reduction

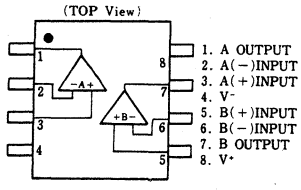
PIN CONFIGURATION

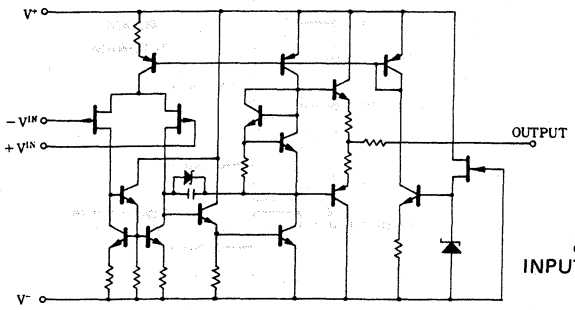




NJM072D Dual J-FET

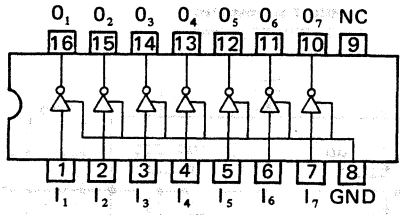
Input Operational Amplifier

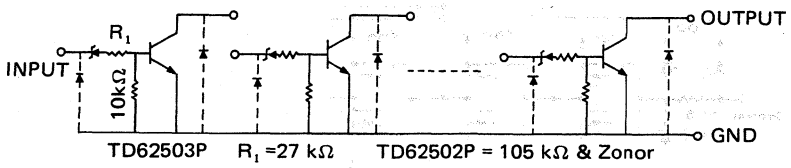




TD62504

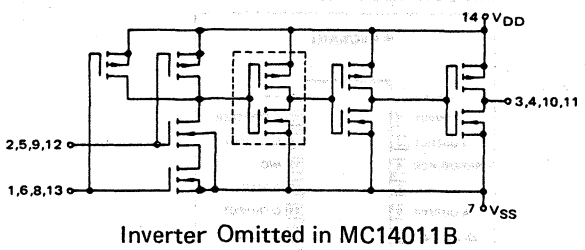
(TOP VIEW)





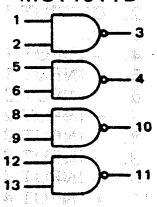
TD62503P R_1 =27 kΩ TD62502P = 105 kΩ & Zonor
TD62504P R_1 105 kΩ

MC14011B Quad 2–Input NAND Gate
MC14081B Quad 2–Input AND Gate

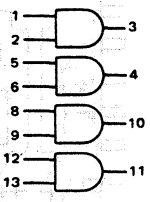


Inverter Omitted in MC14011B

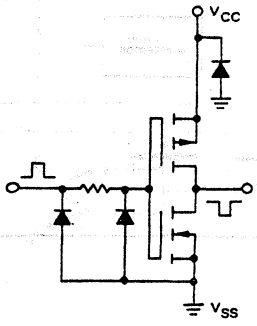
NAND
MC14011B

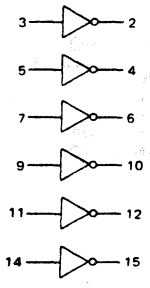


AND
MC14081B



MC14049UB Hex Buffers

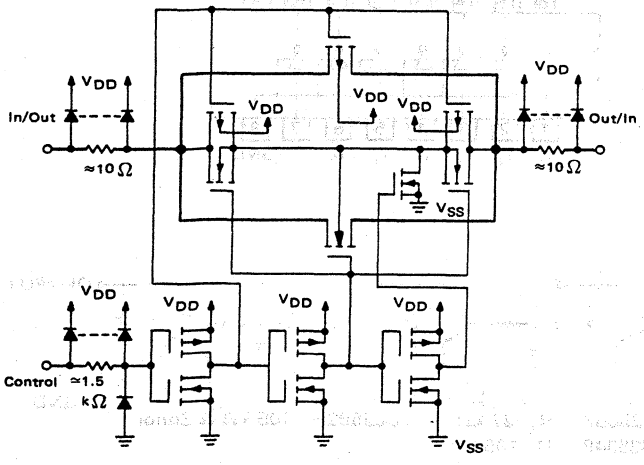


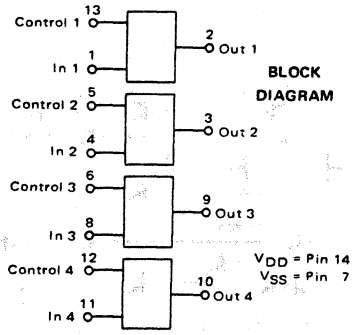


NC = Pin 13, 16
V_{SS} = Pin 8
V_{CC} = Pin 1

MC14066B Quad Analog Switch/Guad Multiplexer

CIRCUIT SCHEMATIC
(1/4 OF DEVICE SHOWN)





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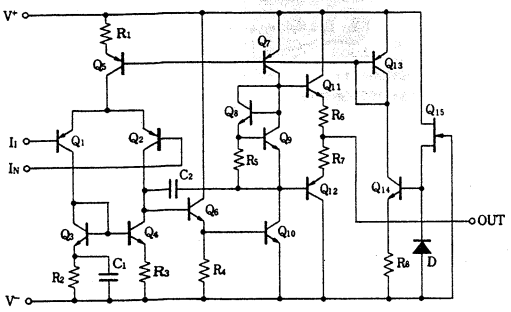
μPC4556C, μPC4557C, μPC4558C

High Performance Dual Operational Amplifier

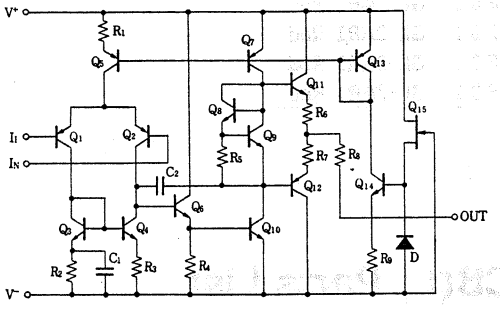
μPC4556C, μPC4557

Equivalent Circuit

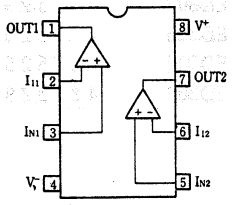


μPC4558C

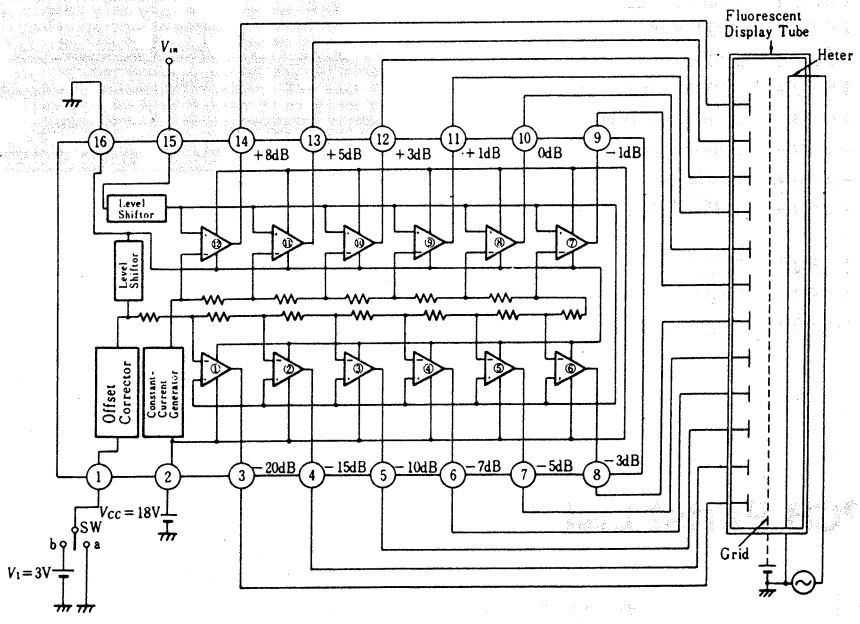
Equivalent Circuit



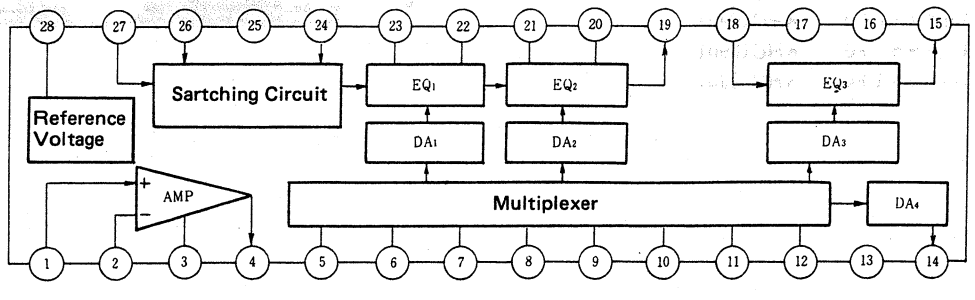
Connection Diagram (Top View)



HA12019 Fluorescent Tube Driver for Graph Display

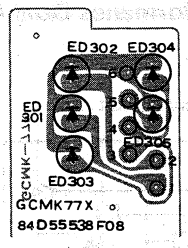


HA12020 Automatic Equalizer



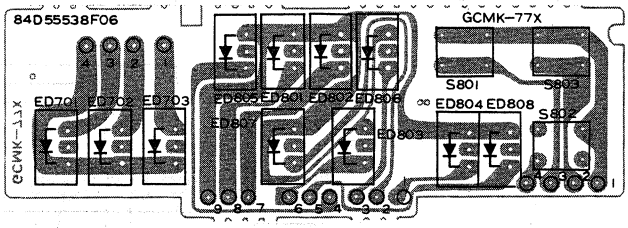
LED PCB Parts List

Symbol No.	Stock No.	Description
(LED)		
ED301	48T52955F01	GL-2AR1 Red
ED302	48T52955F01	GL-2AR1 Red
ED303	48T52955F01	GL-2AR1 Red
ED304	48T52955F01	GL-2AR1 Red
ED305	48T52955F01	GL-2AR1 Red



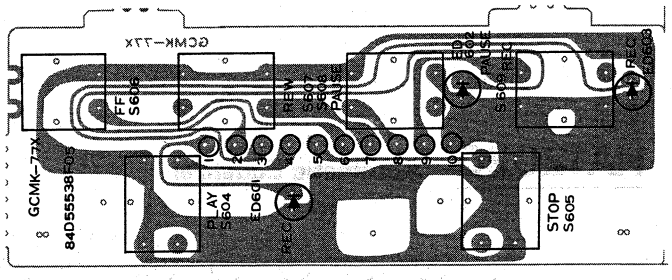
LED & SW PCB(L) Parts List

Symbol No.	Stock No.	Description
(LED)		
ED701	48T55546F01	LD001
ED702	48T55546F01	LD001
ED703	48T55546F01	LD001
ED801	48T55546F04	LD001Y YEL
ED802	48T55546F04	LD001Y YEL
ED803	48T55546F01	LD001
ED804	48T55546F04	LD001Y YEL
ED805	48T55546F02	LD001GG GRN
ED806	48T55546F04	LD001Y YEL
ED807	48T55546F01	LD001
ED808	48T55546F04	LD001Y YEL
(Switch)		
S801	40T51411F01	TACT
S802	40T51411F01	TACT
S803	40T51411F01	TACT



KB Switch PCB Partst List

Symbol No.	Stock No.	Description
(LED)		
ED601	48T52953F01	BR3432S
ED602	48T52953F01	BR3432S
ED603	48T52953F01	BR3432S
(Switch)		
S604	40T52952F01	KHC10903
S605	40T52952F01	KHC10903
S606	40T52951F01	KHC10901
S607	40T52951F01	KHC10901
S608	40T52951F01	KHC10901
S609	40T52951F01	KHC10901



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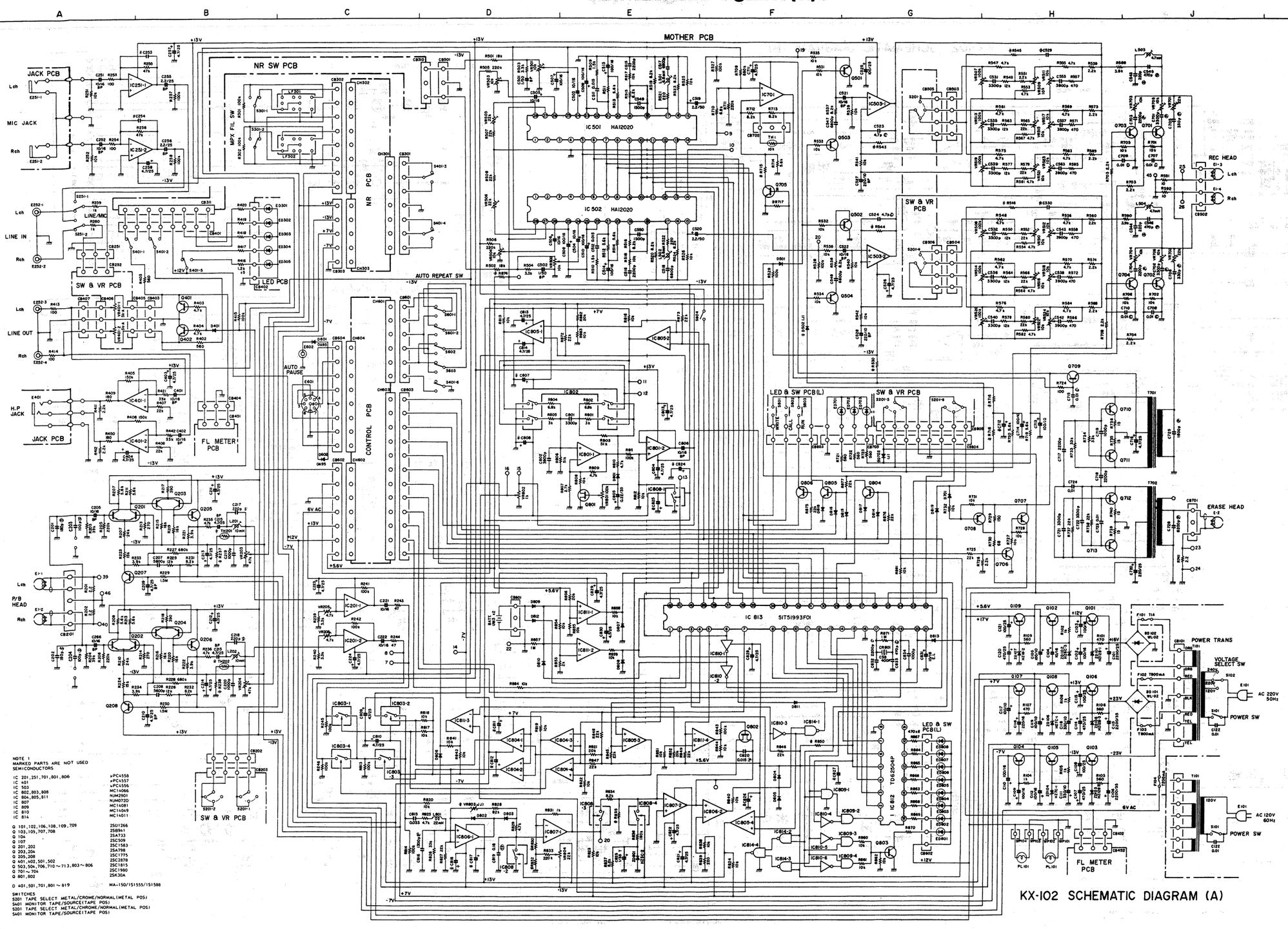
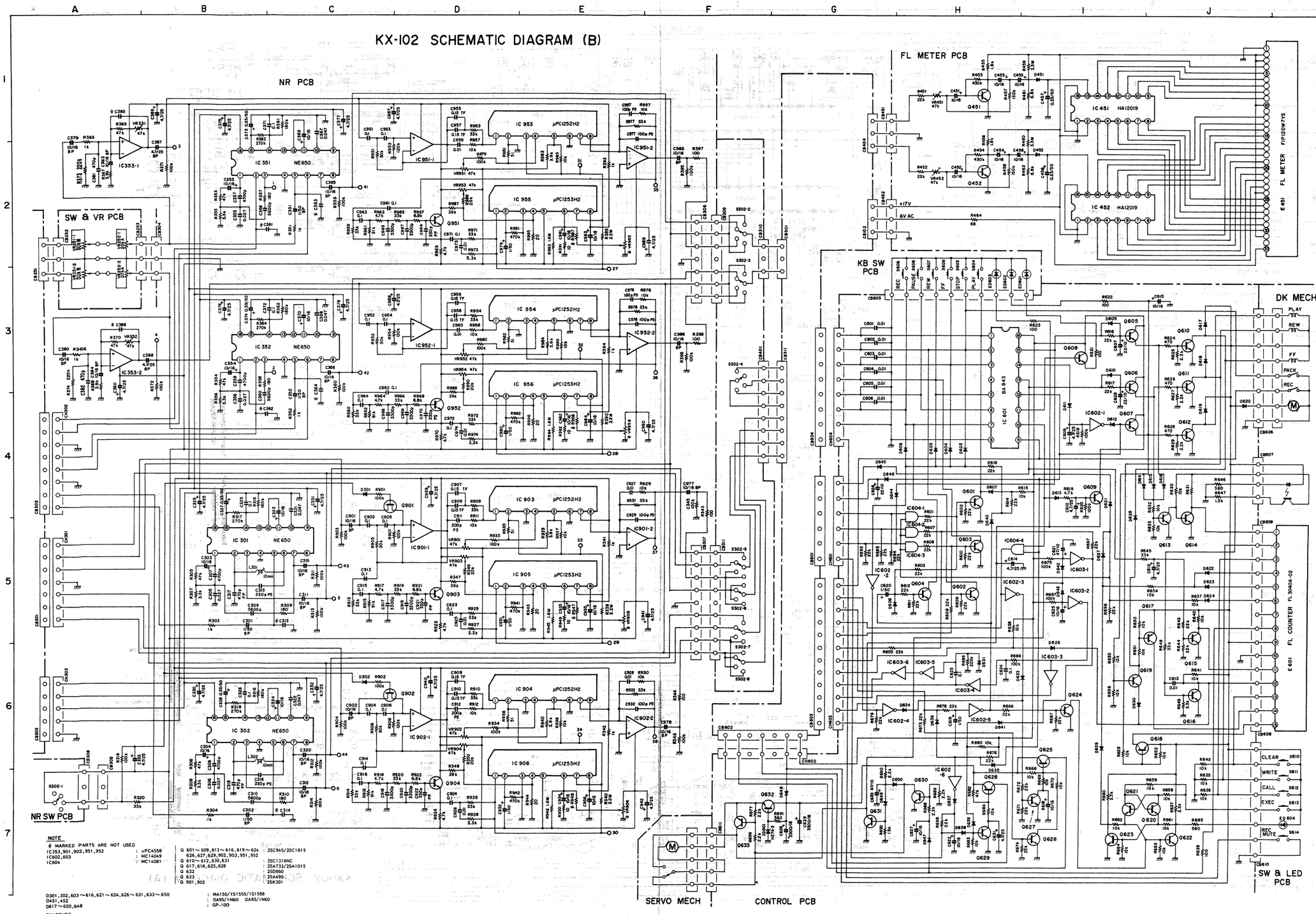
Schematic Diagram(A)



KX-102 SCHEMATIC DIAGRAM (A)

Schematic Diagram(B)

KX-102 SCHEMATIC DIAGRAM (B)



NOTE

✻ MARKED PARTS ARE NOT USED		Q 601~609,613~616,619~624	: 2SC945/2SC1815
IC353,901,902,951,952	: µPC4558	626,627,629,902,903,951,952	
IC602,603	: MC14049	Q 610~612,630,631	: 2SC1318NC
IC604	: MC14081	Q 617,618,625,628	: 2SA733/2SA1015
		Q 632	: 2SD880
		Q 633	: 2SA490
		Q 901,902	: 2SK301

D301,302,603~616,621~624,626~631,633~650 : MA150/1S1555/1S1588
D451,452 : OA95/1N60 OA95/1N60
D617~620,648 : GP-10D

SWITCHES
S302 NR SWITCH DOLBY NR/OFF/dbx TAPE/dbx DISC (OFF POSITION)

Specifications

Heads :	Record/Playback head (Sendust), Erase head (Ferrite)		
Wow & Flutter :	no more than 0.04% (W.R.M.S.)		
Signal-to-Noise Ratio : (CCIR weighted)	Metal-Tape :	Better than 61dB	without NR
		Better than 68dB	with Dolby-B-NR
		Better than 94dB	with dbx NR
	Cr02-Tape :	Better than 59dB	without NR
		Better than 67dB	with Dolby-B-NR
		Better than 92dB	with dbx NR
	Nor.-Tape :	Better than 58dB	without NR
		Better than 67dB	with Dolby-B-NR
		Better than 90dB	with dbx NR
Frequency Response :	20-22,000 Hz (metal tape) (20-20,000 Hz ±3dB) 20-20,000 Hz (Cr02 tape) (20-19,000 Hz ±3dB) 20-18,000 Hz (Nor, tape) (20-18,000 Hz ±3dB)		
Overall Distortion :	no more than 0.7% (Normal tape, lkHz, 0dB)		
Input Sensitivity :	line in ;	100mV	
	mic.;	0.25mV (recommeded microphone impedance : 600 10K ohms)	
Output Level :	line out ;	500mV	
	headphone ;	lmW (8 ohms load)	
Power Consumption :	35W		
Dimensions :	453(W) x 365(W) x 147(H) mm (17.8" x 14.4" x 5.8") (including Legs, Rear Protrusions & Knobs)		
Weight :	Net	9.5kgs (20.9 lbs.)	
	Gross	12.0kgs (26.4 lbs.)	

Specifications and appearance design subject to change without notice.

* NOISE REDUCTION CIRCUIT MADE UNDER LICENCE FROM DOLBY LABORATORIES. THE WORD "DOLBY" AND THE DOUBLE-D SYMBOL ARE THE TRADE MARKS OF DOLBY LABORATORIES.
* dbx is the trade mark of dbx incorporated.

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LUX CORPORATION, JAPAN